Welcome

Thank you for purchasing your Sony VAIO® computer! Your new computer is a superb blend of high technology and easy-to-use functionality. The information provided here is designed to help you to become familiar with the hardware and software applications included with your system.

- View the Electronic Flyer, which provides updates and supplemental information about your computer.
- View the VAIO® Computer Specifications, which lists your computer's hardware specifications and preinstalled software information.

Getting Started

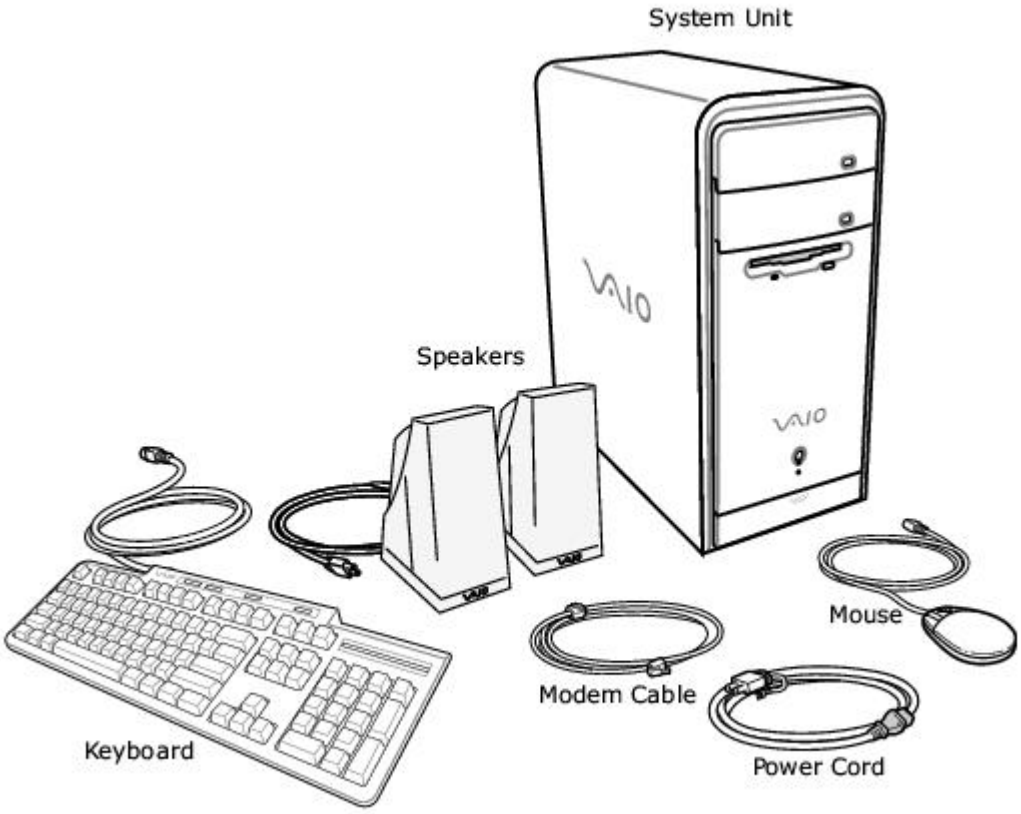
Congratulations on your purchase of the Sony VAIO® computer! Your new, high-performance, multimedia computer combines state-of-the-art computer functionality with the latest audio, video and information technology features.

- Unpacking Your Computer
- Planning An Ergonomic Work Space

Unpacking Your Computer

Your computer may not be supplied with all of the accessories shown, depending on the system configuration you purchased. For details on the accessories supplied with your computer, see the online *Specifications* sheet.

Computer and supplied accessories
(See the online specifications sheet for details about supplied accessories.)



Manuals

- **VAIO® Computer Quick Start** — Provides basic information on setting up and registering your computer. The Quick Start also provides resources for technical support, safety guidelines and owner's information.
- **Microsoft® Windows® XP Guide** — Explains how to use the basic features of the latest Windows operating system.

Online Documentation

- ***VAIO® Computer User Guide* —** Contains information on the hardware and preinstalled software applications included with your system.

  To access the online manual:

  1. Click **Start** in the Windows taskbar, then click **Help and Support**.
  2. From the **VAIO Help And Support Center** menu, click **VAIO User Guide**.

- ***Specifications*** — This online specification sheet describes the hardware and software configuration of your VAIO computer.

  To access this online information:

  1. Click **Start** in the Windows taskbar, then click **Help and Support**.
  2. From the **VAIO Help And Support Center** menu, click **VAIO User Guide**.
  3. Click the **Welcome** link.
  4. Locate the link in the text, "View the VAIO® Computer Specifications..."

Hard Disk Drive Recovery

Your computer is equipped with a utility program that enables you to recover your computer's operating system and preinstalled software.

For more information about hard disk drive recovery:

Your VAIO® computer is not supplied with System or Application Recovery CDs. Use the VAIO Recovery utility to recover your computer's operating system and preinstalled software.

1. Click **Start** in the Windows® taskbar, then click **Help and Support**.
2. From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.

Other

Software Library containing the Microsoft software license agreement and Sony end-user license agreement.

Planning An Ergonomic Work Space

Before you set up your new computer, find the best location for your new computer and plan your work space. There are several ergonomic factors to consider when you arrange your work space:

- **Stable work surface —** Use a stable work surface large enough to support the computer and other peripheral equipment.

- **Ventilation —** Leave at least eight inches of space on the left and back sides of your computer to enable proper ventilation.

- **Placement of the keyboard, mouse, and other input devices —** Place your keyboard, mouse, and other input devices so that your arms and hands are in a relaxed, comfortable position. The keyboard should be directly in front of you. Adjust the level of the keyboard so that your lower arms are parallel to the floor. Keep your wrists in a relaxed position when you are using the keyboard—not angled up or down. Use the palmrest only briefly, for resting. While typing, never use the palmrest or rest your hands on the table. Position the mouse at the same level as the keyboard. Hold the mouse with a relaxed hand, and use your whole arm to move it. Take breaks during sessions with your computer. Excessive use of the mouse or a joystick may strain muscles or tendons.

- **Furniture and posture —** Sit in a chair with good back support and armrests. Adjust the level of the chair so your feet are flat on the floor. A footrest may make you more comfortable. Sit with relaxed, upright posture—avoid slouching forward or leaning far backward.

- **Viewing angle of the display —** Position the display 18 to 26 inches directly in front of you, with the top of the screen at or a little below eye level. Use the display's tilting feature to find the best position. You can reduce eye strain and muscle fatigue by placing the display in the proper position.

- **Lighting —** Choose a location where windows and lights do not create glare and reflection on the display. Use indirect lighting to avoid bright spots on the display. You can also purchase accessories for your display that help reduce glare. Proper lighting adds to your comfort and work effectiveness.

Locating Controls And Ports

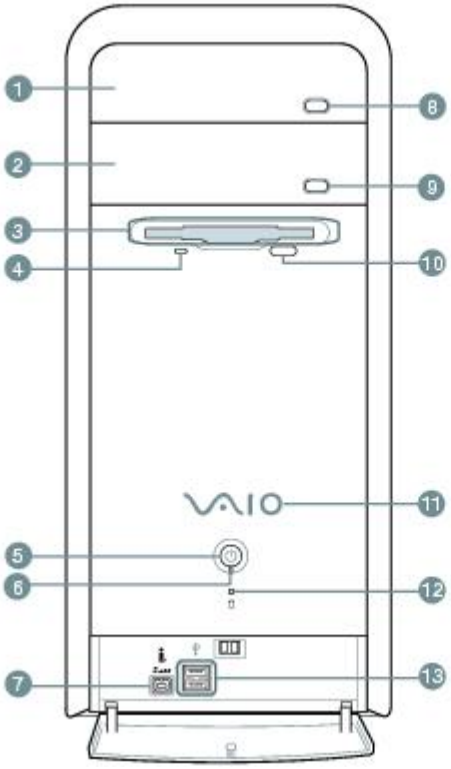
This section is intended to familiarize you with the controls, ports and jacks on your computer. Your computer may not be equipped with all of these hardware features and the location of the controls, ports, and jacks may vary from the illustrations shown in this section. To view the specific connection capabilities for your system, see the online specifications sheet.

- About the Front Panel
- About the Back Panel
- About the Keyboard

About the Front Panel

The front panel of your VAIO® Computer enables access to the optical and floppy disk drives. It also includes access to the Universal Serial Bus (USB) and i.LINK® ports that enable you to connect compatible peripheral devices.

Front panel



1 Optical drive 1

See the online specifications sheet for optical drive information.

2 Optical drive 2

See the online specifications sheet for optical drive information.

3 Floppy disk drive

Reads and writes data from and to a 3.5-inch floppy disk.

4 Floppy disk drive access indicator

Light is green while reading and writing data from and to a floppy disk.

5 Power button

The power button turns the computer on/off.

6 Standby indicator

Light is amber when the computer is in Stand by mode.

7 i.LINK 4-pin S400 port (IEEE 1394)

Connection for a compatible digital device.

8 Optical drive 1 eject button

Ejects a disc from Optical drive 1.

9 Optical drive 2 eject button

Ejects a disc from Optical drive 2.

10 Floppy disk eject button

Ejects a floppy disk.

11 Power indicator (VAIO)

Light is blue when the computer is on. The light turns off when the computer is in Standby mode or turned off.

12 Hard disk drive and optical disc drive access indicator

Light is amber while reading and writing data.

13 Universal Serial Bus (USB 2.0) ports (2)

Connections for compatible high/full/low-speed USB devices.

For your convenience, your computer includes USB and i.LINK ports on both the front and back panels. The 4-pin i.LINK port is located on the front panel and the 6-pin i.LINK port is located on the back.

Additional information

Your computer is equipped with two optical disc drives that have a drive eject button on the drive door.

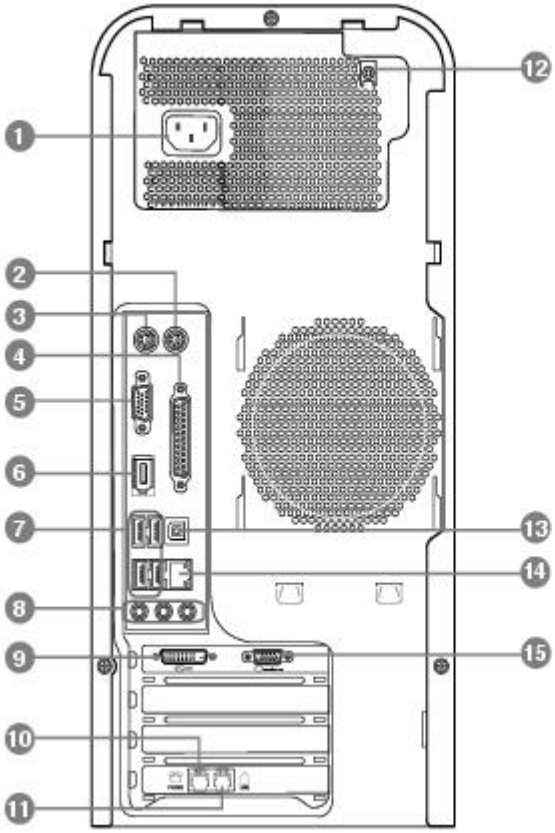
- After pushing the eject button, wait for the drive to stop reading the CD. It may take a few moments for the drive tray to eject.
- Gently push the drive tray in, when closing the optical drive door. Do not force the door or handle roughly.
- After closing the drive door, wait a few moments for the drive to begin reading the CD.

About the Back Panel

The back panel of your computer contains the ports for supplied and optional accessories. The icons on the back panel locate and identify the ports and jacks on your computer.

Your system may vary based on the configuration you purchased.

Back panel (PCV-RS320 series model)



1 AC Input port

Connection for the supplied power cord.

2 Mouse port

Connection for a PS/2® mouse.

3 Keyboard port

Connection for a PS/2® keyboard.

4 Printer port

Connection for a parallel device, such as a printer or scanner.

5 Monitor port[1]

Connection for a standard display.

6 i.LINK 6-pin S400 port (IEEE 1394)

Connection for a compatible digital device.

7 Universal Serial Bus (USB 2.0) ports (4)

Connections for compatible high/full/low-speed USB devices.

8 Microphone jack

Connection for a microphone (optional).

Headphones jack

Connection for the supplied speakers or optional headphones.

Line In jack

Connection for an audio device.

9 Monitor (DVI) port[2]

Connection for a DVI monitor.

10 Telephone jack

Connection for a telephone cable (optional) to the computer.

11 Modem line jack

Connection for the modem cable to the wall jack.

12 Speaker DC Out jack[3]

Connection for the speaker power cable.

13 S/P DIF Optical Out port

Connection for a digital audio or optical device.

14 Ethernet port

Connection for a 10BASE-T/100BASE-TX Ethernet interface.
(The port marked with (Network) is for LAN connections only.)

15 Monitor port[4]

Connection for a standard display.

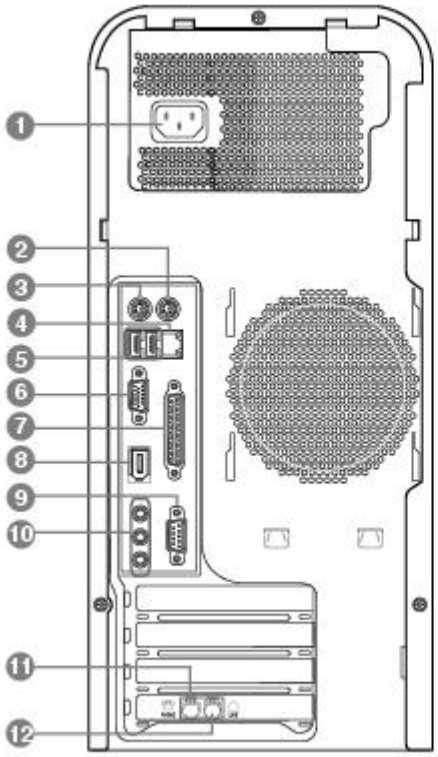
[1] On some models, this monitor port may have a cover and is not available for use.

[2] A DVI monitor port is available on selected models only.

[3] The speaker DC out jack is used to provide power to audio stereo speakers. Audio stereo speakers which require a speaker power cable may be purchased separately.

[4] On some models, the monitor port may be in a different location.

Back Panel (PCV-RS310 series model)



1 AC Input port

Connection for the supplied power cord.

2 Mouse port

Connection for a PS/2® mouse.

3 Keyboard port

Connection for a PS/2® keyboard.

4 Ethernet port

Connection for a 10BASE-T/100BASE-TX Ethernet interface. (The port marked with (Network) is for LAN connections only.)

5 Universal Serial Bus (USB 2.0) ports (2)

Connections for compatible high/full/low-speed USB devices.

6 Monitor port

Connection for a display.

7 Printer port

Connection for a parallel device, such as a printer or scanner.

8 i.LINK 6-pin S400 port (IEEE 1394)

Connection for a compatible digital device.

9 Serial port

Connection for a compatible serial device, such as a digital still camera.

10 Headphones jack

Connection for the supplied speakers or optional headphones.

Line In jack

Connection for an audio device.

Microphone jack

Connection for a microphone (optional).

11 Telephone jack

Connection for a telephone cable (optional) to the computer.

12 Modem line jack

Connection for the modem cable to the wall jack.

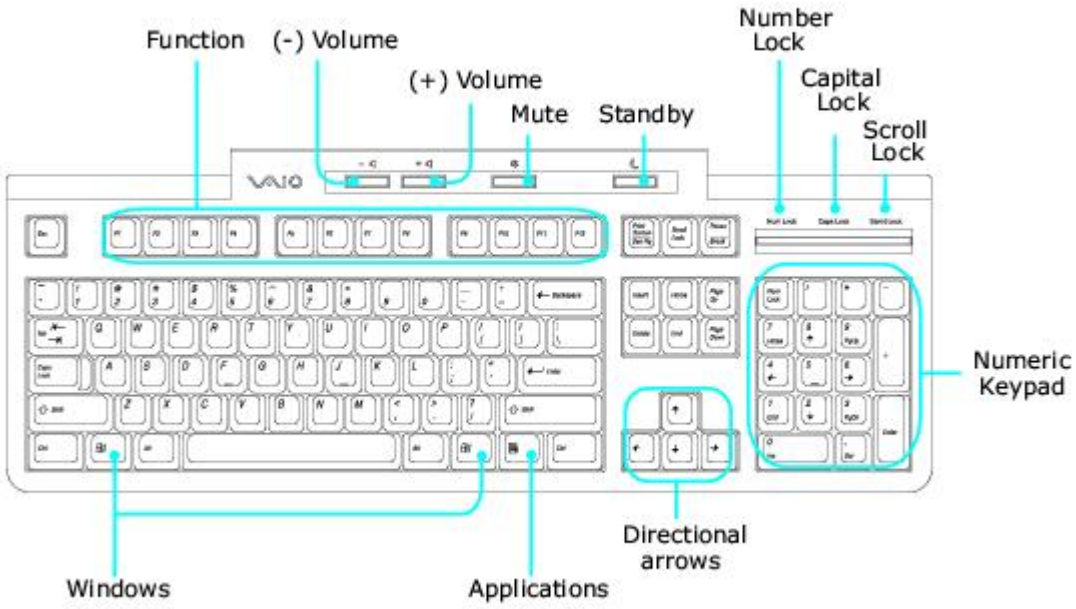
✍ i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system, and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other.

Please refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK devices to your system, such as an optical or hard disk drive, confirm their operating system compatibility and required operating conditions.

About the Keyboard

Your VAIO® keyboard uses a standard key arrangement with additional keys that perform specific functions.

VAIO Keyboard



KEY **DESCRIPTION**

Function The 12 function keys along the top of the keyboard are used to perform certain tasks. The task associated with each function key may vary from one application to the next.

Volume Control Press a button to increase (+) or decrease (-) the volume of the speakers.

Mute Press the button to turn off the volume of the speaker. Press the Mute button again to restore sound.

Standby Press the button to place the computer in Standby mode. Press the Power button or any key briefly, to resume normal operation.

Numeric keypad Use the numeric keypad area to type numbers or to perform basic math calculations. Press the Num Lock key to activate the numeric keypad. (The Num Lock indicator lights.) Press the Num Lock key again to deactivate the numeric keypad.

Directional Arrows The Up, Down, Left, and Right arrow keys move the pointer on the screen.

Applications

The Applications key displays a shortcut menu in certain software applications. Pressing this key is equivalent to clicking the right mouse button.

Windows

The key with the Microsoft® Windows® logo, displays the Start menu. Pressing this key is equivalent to clicking Start on the taskbar.

INDICATORS FUNCTION

Num Lock The Num Lock indicator lights when the numeric keypad is activated. When the indicator is off, the directional

arrow and correction keys on the numeric keypad area are active.

Caps Lock The Caps Lock indicator lights up to advise you that the keyboard is set to type letters in uppercase. When the indicator is off, the letters appear in lower case as you type.

Scroll Lock The Scroll Lock indicator lights up to advise you that your screen's scrolling pattern has changed. When the indicator is off, the screen scrolls normally. This function is not available with all software applications.

Setting Up Your Computer

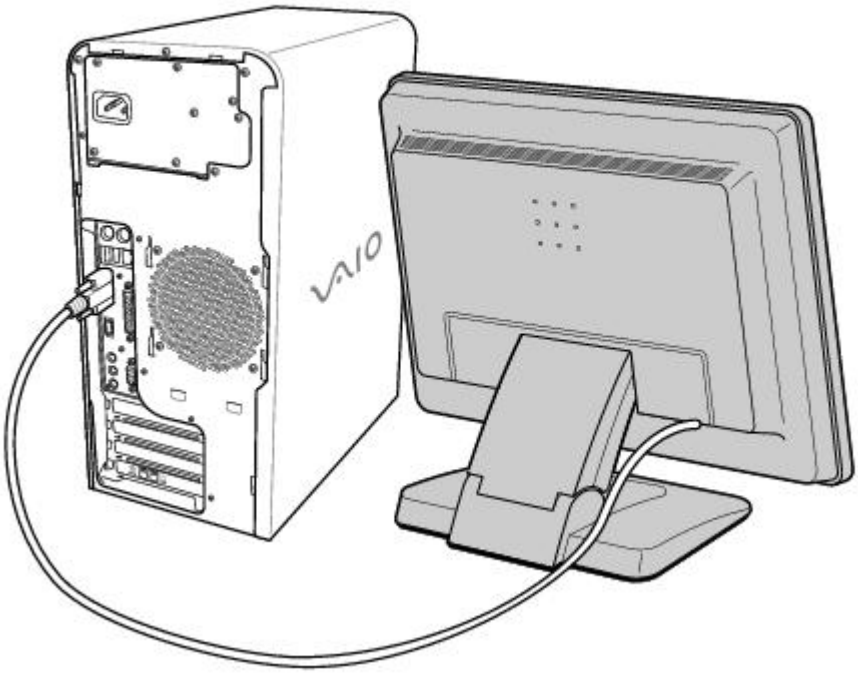
Your computer may not be equipped with all of the hardware features described in the section. The location of the controls, ports, and jacks may vary from the illustrations shown. See the online specifications sheet for your system's specific hardware configuration.

- Connecting a Display (Monitor)
- Connecting the Speakers
- Connecting the Keyboard and Mouse
- Connecting the Telephone and Modem Cables
- Connecting the Power Cords
- Turning On Your Computer
- Registering your Computer

Connecting a Display (Monitor)

Plug the display's cable into the monitor port. If necessary, plug the display's cable into the back of the display.

To connect a display (PCV-RS310 series model)



Install your equipment so that you can easily reach the power outlet in the event of an emergency.

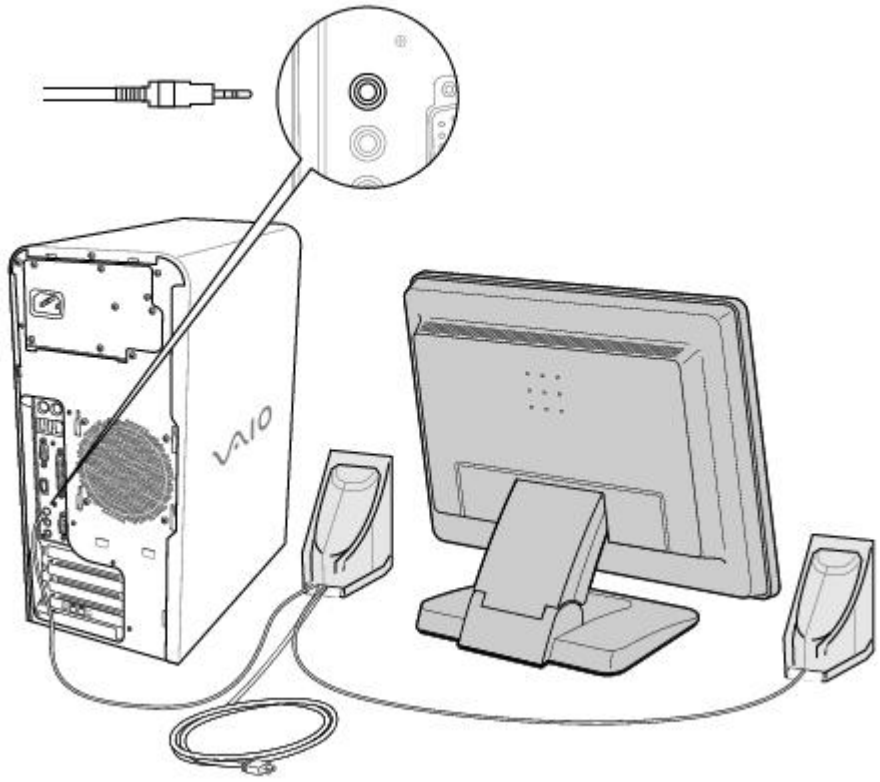
Connecting the Speakers

The right and left speakers are attached. The right speaker has a speaker wire that ends in a jack connector and an AC power cord that supplies power to both speakers.

1. From the right speaker, plug the jack connector into the Headphones jack located on the back panel of your computer.

2. From the right speaker, insert the AC adapter plug into a grounded AC wall outlet or surge supressor.

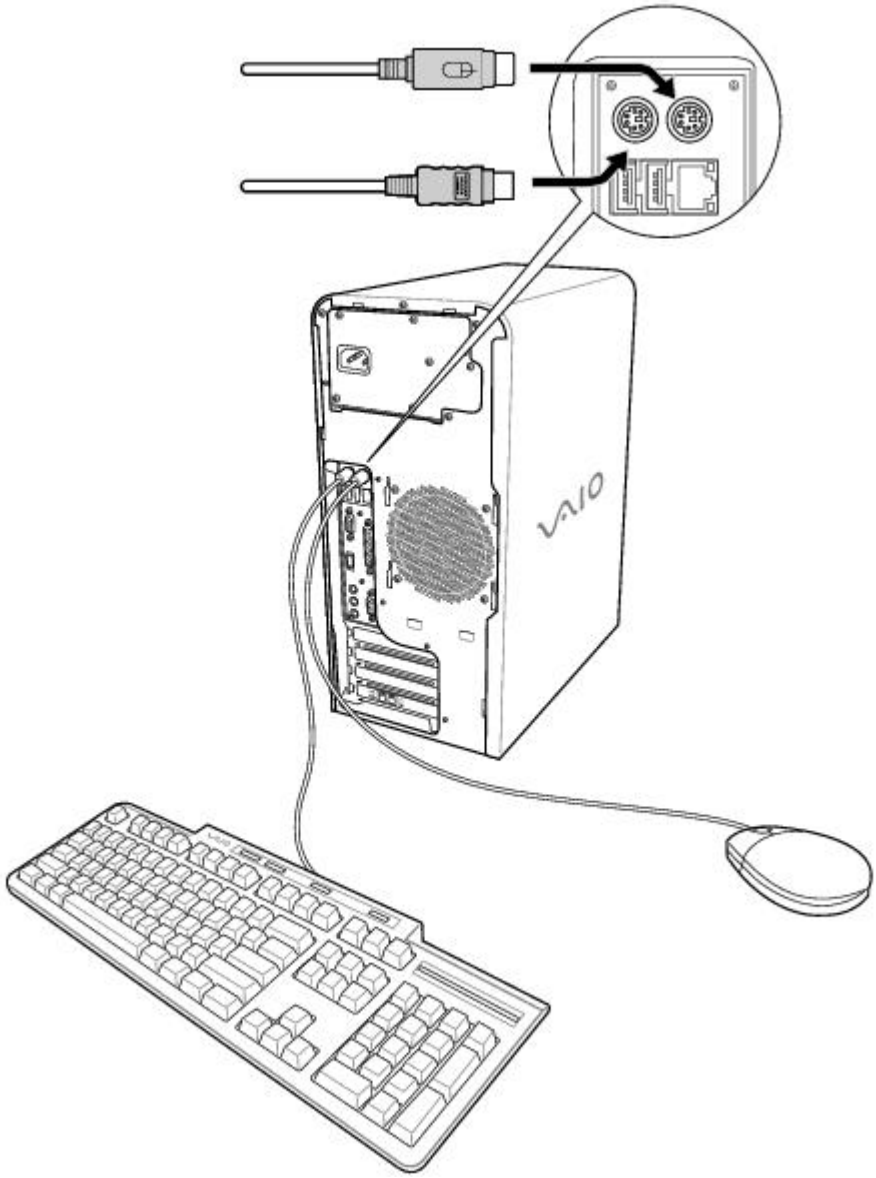
To connect the speakers (PCV-RS310 series model)



Connecting the Keyboard and Mouse

1. Plug the keyboard cable into the keyboard port on the back of the computer.
2. Plug the mouse cable into the mouse port on the back of the computer.

To connect the keyboard and mouse (PCV-RS310 series model)



To use an optical mouse

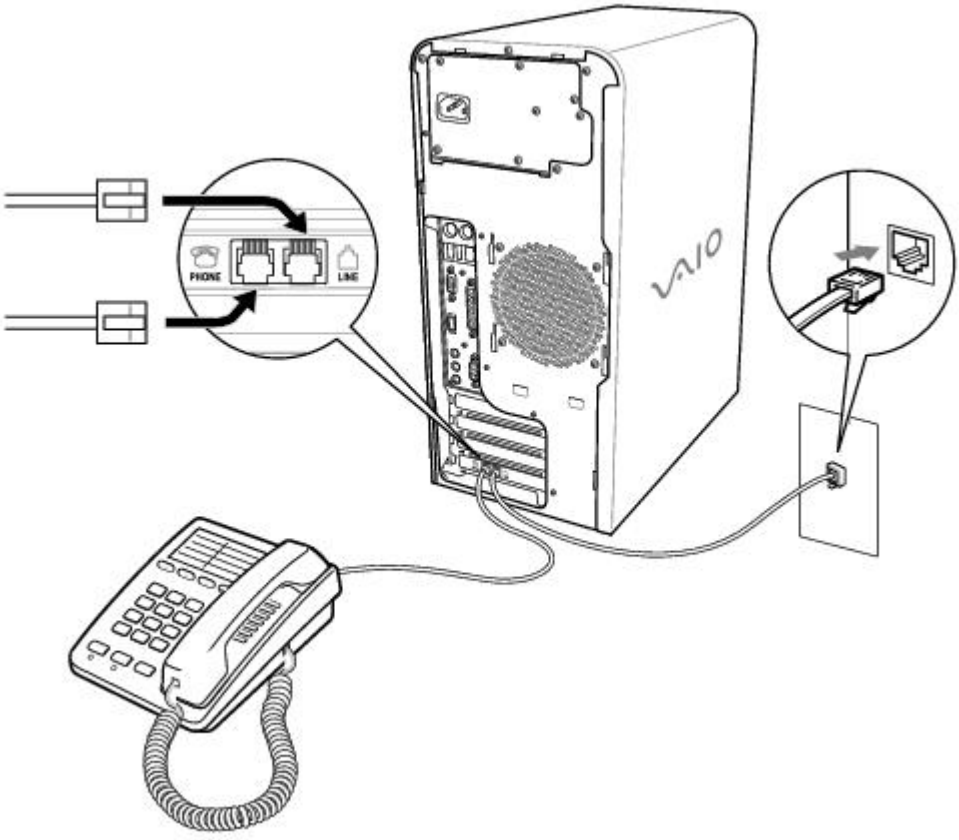
An optical mouse requires an ideal surface texture in order to provide precision pointing and tracking.

- Use surfaces such as plain paper, card stock, or fabric that have minimal repetitive patterning.
- Avoid surfaces such as mirrors, smooth glass, or magazines that have half- tone printing.

Connecting the Telephone and Modem Cables

1. Unplug your telephone from the wall jack and plug its cable into the telephone jack located on the back panel of your computer.
2. Plug the modem cable (supplied) into the modem line jack located on the back panel of your computer
3. Plug the other end of the modem cable into the wall jack.

To connect the telephone and modem cables (PCV-RS310 series model)

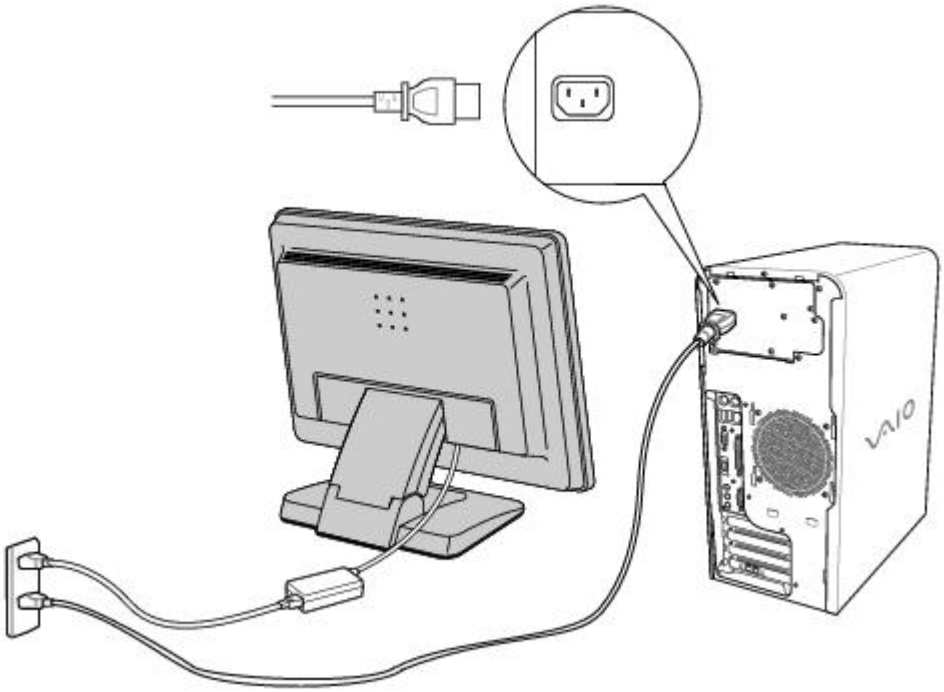


⚠ **Your computer has a protective sticker covering the Ethernet port located on the rear panel. Connect only 10BASE-T and 100BASE-TX cables to the Ethernet port. Using other cables or a telephone cable may result in an electric current overload that can cause a malfunction, excessive heat, or fire in the Ethernet port. For help on connecting to a network, see your network administrator.**

Connecting the Power Cords

1. Plug the power cord connector into the AC Input port, located on the back panel of the computer.
2. Plug both the display and computer power cords into a grounded AC wall outlet or a power strip.

To connect the power cords (PCV-RS310 series model)

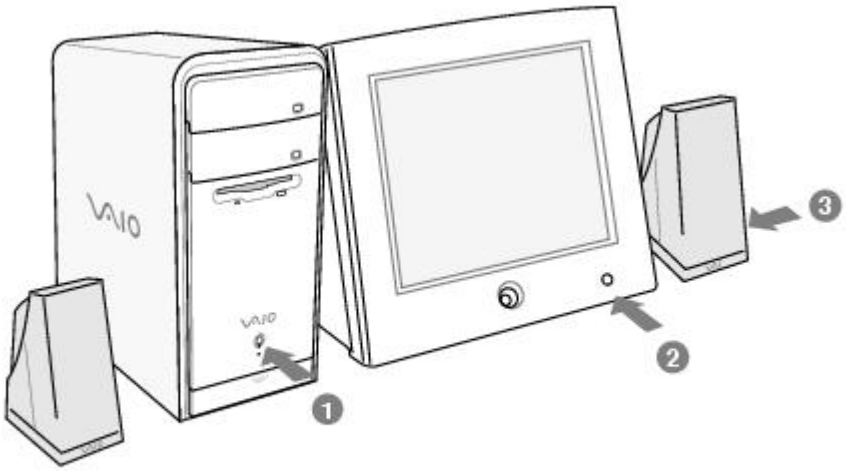


Turning On Your Computer

When you start your system for the first time, your computer may detect new equipment and display a dialog box that prompts you to restart your computer. Respond to this prompt immediately.

1. Press the power button on the computer to turn on the power.
2. Press the power button on the display to turn on the power.
3. Press the power button, located on the side of the right speaker, to turn on the power.

To turn on your computer



Registering your Computer

Take advantage of Sony's commitment to quality customer support and receive these benefits by registering your computer:

- **Sony Customer Support —** Communicate with a Support Representative to troubleshoot problems you may be having with your computer.
- **Limited warranty —** Protect your investment. See the Limited Warranty Card for more details.

You are prompted to register your computer the first time you turn on the unit. Follow the on-screen instructions to complete the registration process. If you are not able to register your computer during the first session, you are provided with additional registration opportunities later.

VAIO Software Tutorials

Your new VAIO® computer has audio and video software that makes it easy for you to create and edit videos, still images, and music files. This section describes your VAIO multimedia software.

Depending on the system configuration purchased, your computer may not include all of the software described in this section.

Your computer's visual presentation of the VAIO AV applications may vary from those shown in this manual.

- Multimedia Overview
- About Recordable CD and DVD Media and Playback Equipment
- Copying Data to Recordable CD and DVD media
- Using Drag'n Drop CD+DVD Software
- Using RecordNow Software
- Using Click to DVD Software
- About Recording and Playing Music
- Using SonicStage Software
- Using SonicStage Mastering Studio Software
- About Still Images (Photos)
- Using PictureGear Studio Software
- About Preinstalled Image-editing Software
- About Video Editing
- Using DVgate Plus Software
- Using DVgate Software
- About Networks
- Using VAIO Media Software
- Using Network Smart Capture Software

Multimedia Overview

The preinstalled multimedia software give you a wide range of creative capability, such as:

- Listening to music
- Creating music CDs
- Copying music from CDs and put them on your computer
- Transferring music from your computer to different external devices
- Viewing and editing your still images
- Creating calendars, labels, and different art with your still images
- Saving your pictures into binders, albums, or onto the Web
- Saving your pictures onto CDs or DVDs
- Creating interactive DVDs
- Backing up data on CDs or DVDs
- Editing your video content
- Saving your video content onto DVDs
- Sharing your multimedia between computers and across networks

✍ Unauthorized duplication of audio or video files is a violation of applicable laws.

About Recordable CD and DVD Media and Playback Equipment

Selecting the appropriate CD or DVD media

The following section is intended as general information for using your DVD-RW or DVD±RW drive with appropriate CD or DVD media. You can find suggestions for selecting blank recording media, understanding different disc formats, and identifying compatible playback equipment.

If your VAIO computer does not have a recordable optical drive, you cannot create CDs or DVDs.

This table can help you identify the appropriate media to use with your recordable optical drive.

Drive Type	Video and Data DVD				Music and Data CDs	
for General	DVD-R	DVD-RW	DVD+R	DVD+RW	CD-R	CD-RW
DVD-RW	Yes	Yes	No	No	Yes	Yes
DVD±RW	Yes	Yes	Yes	Yes	Yes	Yes

Recordable CD and DVD media types

- **DVD-R for General —** DVD Recordable media for general use, also known as DVD-R(G), can be written to one time only and cannot be erased. You can use your DVD-RW or DVD±RW drives to write data to a DVD-R disc until the disc is full, but you cannot erase or overwrite any existing data. Certain software applications and disc formatting might permit the addition of information to a DVD-R disc that already contains data. DVD-R for General media is appropriate for both video and data DVD burning.

  DVD-R for general media is not the same as DVD-R for Authoring media. DVD-R for Authoring discs are a special media made for commercial DVD production and equipment.

- **DVD-RW —** DVD Rewritable media can be written to, erased, and written to again. Using this media with your DVD-RW or DVD±RW drives, you can record information to the same disc repeatedly, however, you must erase existing data on the disc before each recording session. Certain software applications and disc formatting might permit the addition of information to a DVD-RW disc that already contains data. DVD-RW media is appropriate for both video and data DVD burning.

- **DVD+R —** DVD+R Recordable media can be written to once and cannot be erased. You can use your DVD-RW or DVD±RW drives to write data to a DVD+R disc until the disc is full, but cannot erase or overwrite any existing data. DVD+R media is appropriate for both video and data DVD burning.

- **DVD+RW —** DVD+RW Rewritable media can be written to, erased, and written to again. Using this media with your DVD-RW or DVD±RW drive, you can record information to the same disc repeatedly, however, you must erase existing data on the disc before each recording session. Certain software applications and disc formatting might permit the addition of information to a DVD+RW disc that already has data on it. DVD+RW media is appropriate for both video and data DVD burning.

- **CD-R —** CD Recordable media can be written to once and cannot be erased. Certain software applications and disc formatting might permit the addition of information to a CD-R disc that already has data on it. CD-R media is appropriate for both music and data CD burning.

- **CD-RW —** CD Rewritable media can be written to, erased, and written to again. Certain software applications and disc formatting might permit the addition of information to a CD-RW disc that already has data on it. CD-RW media is appropriate for music and data CD burning.

Incompatible DVDs and CDs

You cannot use these CD or DVD media for recording data or music:

- CD-ROM (compact disc read-only media)
- DVD-R for Authoring

- DVD-RAM
- DVD-ROM

Media compatibility with different equipment varies between manufacturers. If you experience difficulty with recording data or playing a disc, try a different disc or a different brand of media.

Additional Information

- CD and DVD format is Universal Disk Format (UDF) with Joliet. UDF is a file system standard. Joliet is an extension to the ISO 9660 standard, which enables CDs and DVDs to use long filenames and Unicode characters in a Windows operating system environment.
- A DVD-ROM drive cannot record data to a CD or DVD. A DVD-ROM drive cannot read multi-border and multi-session discs.
- DVD+R and DVD-R drives cannot read appended data.

About Recordable CD and DVD Media and Playback Equipment

Selecting the appropriate CD or DVD media

The following section is intended as general information for using your DVD-RW or DVD±RW drive with appropriate CD or DVD media. You can find suggestions for selecting blank recording media, understanding different disc formats, and identifying compatible playback equipment.

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for General	DVD-R	DVD-RW	DVD+R	DVD+RW	CD-R	CD-RW
DVD-RW	Yes	Yes	No	No	Yes	Yes
DVD±RW	Yes	Yes	Yes	Yes	Yes	Yes

Recordable CD and DVD media types

- **DVD-R for General —** DVD Recordable media for general use, also known as DVD-R(G), can be written to one time only and cannot be erased. You can use your DVD-RW or DVD±RW drives to write data to a DVD-R disc until the disc is full, but you cannot erase or overwrite any existing data. Certain software applications and disc formatting might permit the addition of information to a DVD-R disc that already contains data. DVD-R for General media is appropriate for both video and data DVD burning.

  DVD-R for general media is not the same as DVD-R for Authoring media. DVD-R for Authoring discs are a special media made for commercial DVD production and equipment.

- **DVD-RW —** DVD Rewritable media can be written to, erased, and written to again. Using this media with your DVD-RW or DVD±RW drives, you can record information to the same disc repeatedly, however, you must erase existing data on the disc before each recording session. Certain software applications and disc formatting might permit the addition of information to a DVD-RW disc that already contains data. DVD-RW media is appropriate for both video and data DVD burning.

- **DVD+R —** DVD+R Recordable media can be written to once and cannot be erased. You can use your DVD-RW or DVD±RW drives to write data to a DVD+R disc until the disc is full, but cannot erase or overwrite any existing data. DVD+R media is appropriate for both video and data DVD burning.

- **DVD+RW —** DVD+RW Rewritable media can be written to, erased, and written to again. Using this media with your DVD-RW or DVD±RW drive, you can record information to the same disc repeatedly, however, you must erase existing data on the disc before each recording session. Certain software applications and disc formatting might permit the addition of information to a DVD+RW disc that already has data on it. DVD+RW media is appropriate for both video and data DVD burning.

- **CD-R —** CD Recordable media can be written to once and cannot be erased. Certain software applications and disc formatting might permit the addition of information to a CD-R disc that already has data on it. CD-R media is appropriate for both music and data CD burning.

- **CD-RW —** CD Rewritable media can be written to, erased, and written to again. Certain software applications and disc formatting might permit the addition of information to a CD-RW disc that already has data on it. CD-RW media is appropriate for music and data CD burning.

Incompatible DVDs and CDs

You cannot use these CD or DVD media for recording data or music:

- CD-ROM (compact disc read-only media)
- DVD-R for Authoring

- DVD-RAM
- DVD-ROM

✍ Media compatibility with different equipment varies between manufacturers. If you experience difficulty with recording data or playing a disc, try a different disc or a different brand of media.

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- DVD+R and DVD-R drives cannot read appended data.

About Compatible Playback Equipment

Compatibility between CD or DVD media and playback equipment may vary.

- Not all DVD players can play back video DVDs created on your computer.
- Some DVD players can play back DVD-R(G) media, but are incompatible with DVD-RW media.
- Some DVD players can only read certain brands of DVD-R or DVD-RW media.
- Some older computer CD-ROM drives cannot read data CD-R and CD-RW discs.
- Some older computer DVD-ROM drives cannot read certain DVD discs.

Determining equipment, media, and format compatibility

This table provides general information to help you determine the appropriate media formats and equipment for playing different media. For specific information about product compatibility, see the documentation supplied with the specific media and equipment.

Playback Equipment

	Media and Format Compatibility			
	Video DVD	**Music CD**	**Data DVD**	**Data CD**
Computer DVD drive	Varies	Yes	Varies	Yes
Computer CD drive	No	Yes	No	Yes
DVD player	Varies	Varies	No	No
Audio CD player	No	Varies	No	Varies

Copying Data to Recordable CD and DVD media

You can copy files to recordable media, using your computer's CD-RW, DVD-RW, or DVD±RW drive. For detailed information on your system's hardware configuration, see the specification sheet.

Adding data to a data DVD

When creating a data DVD, you can choose to keep the writing session open and make a disc appendable, which means you can keep adding information to the disc.

- **Appendable writing —** You can add more data to a disc as long as space is available on the disc. The recording session can stay open until the disc is full. Although the space on the disc may be used efficiently, a disc written to incrementally may not be compatible with all DVD drives.
- **Non-appendable writing —** All data is written to the disc at one time and the writing session is closed, even if there is more space available on the disc. You can not add more data to the disc. Non-appendable discs are more compatible with different DVD drives.

✍ A video DVD is always non-appendable.

The table below describes the writing method for different media types for appendable and non-appendable writing.

	Writing Method	
Media Type	**Appendable**	**Non-appendable**
DVD-R	Multi-border	Disc at once
DVD-RW	Restructured overwrite	Disc at once
DVD+R	Multi-session	Disc at once
DVD+RW	Single-session	Disc at once

Using Windows XP to create a CD or DVD

1. Insert a blank CD-R or CD-RW disc into your CD-RW, DVD-RW, or DVD±RW drive. (If the CD Drive window appears, click **Take no action**.)

2. Click **Start** in the Windows® taskbar, and then click **My Computer**. Locate the files and folders you want to copy to the CD.

3. Point to select a file or folder, or select several files or folders by holding down **CTRL** while pointing to each of the files you want.

4. Under **File and Folder Tasks**, click **Copy this file**, **Copy this folder**, or **Copy the selected items**.

   If the files are located in My Pictures, under **Picture Tasks**, click **Copy to CD** or **Copy all items to CD**. Skip to step 6.

   If your files are located in My Music, under **Music Tasks**, click **Copy to audio CD** or **Copy all items to audio CD**. Skip to step 6.

5. In the **Copy Items** dialog box, click the **read/write drive** icon[1], and then click **Copy**.

6. Under **Other Places**, click **My Computer**, and then click the **CD-RW** or **DVD-RW drive**.

   Windows displays the temporary area that holds the files until they are copied to the CD.

7. Confirm that the files and folders you want to copy are displayed under **Files Ready to Be Written to the CD**.

8. Click **Write to CD**, under **CD Writing Tasks**. The CD Writing Wizard starts.

9. Follow the on-screen instructions in the wizard to complete writing the files or folders to the CD.

   When the writing process is finished, the wizard displays a check box that enables you to copy another CD. To create additional copies, click **Yes**, **write these files to another CD**, insert a blank CD-R or CD-RW disc, and then click **Next**.

[1] The read/write drive letter designation may vary, depending your system's hardware configuration.

Using Drag'n Drop CD+DVD Software

Drag'n Drop CD+DVD software easily creates data CDs and DVDs, as well as music CDs. Music, DISC Backup, and Data are the main features for Drag'n Drop software.

1. Click **Start** in the Windows® taskbar and click **All Programs**.
2. Point to **Drag'n Drop CD+DVD** and then click **Drag'n Drop CD+DVD**.

   Drag'n Drop CD+DVD software starts and three Drag'n Drop CD+DVD icons (Music, Disc Backup, and Data) appear on your desktop.
3. Drag the desired music files onto the **Music** icon.

   Drag the contents of a CD or DVD that you want to back up onto the **DISC Backup** icon.

   Drag the desired data files onto the **Data** icon.

Drag'n Drop CD+DVD icons

4. Insert a blank, recordable CD or DVD[1], and click the arrow icon. A progress windows displays as the data is written to the CD or DVD media.

[1] Use the appropriate CD or DVD media for each recording session.

To access Drag'n Drop CD+DVD software Help

1. Click **Start** in the Windows® taskbar and point to **All Programs**
2. Point to **Drag'n Drop CD+DVD**, and then click **Drag'n Drop CD+DVD Help**.

Using RecordNow Software

If your VAIO® computer is equipped with a DVD-RW or DVD±RW drive, you can copy files to DVD recordable media, using the preinstalled RecordNow software.

1. Click **Start** in the Windows® taskbar and point to **All Programs**.
2. Point to **VERITAS Software**, point to RecordNow, and then click **RecordNow**.

   The RecordNow main window appears.

RecordNow main window

To access RecordNow software Help

1. Click **Start** in the Windows® taskbar and point to **All Programs**.
2. Point to **VERITAS Software**, point to **RecordNow**, and then click **RecordNow Help**.

Using Click to DVD Software

Use **Click to DVD Automatic Mode** software to quickly and easily make interactive DVDs. For more customized features, use **Click to DVD** software.

To access Click to DVD software Help

1. Click **Start** in the Windows® taskbar and point to **All Programs**.
2. Point to **Click to DVD**, and then click to select **Click to DVD Help**.

To access Click to DVD Automatic Mode software Help

1. Click **Start** in the Windows® taskbar and point to **All Programs**.
2. Point to **Click to DVD**, and then click to select **Click to DVD Automatic Mode Help**.

Starting a video DVD project

1. Click **Start** in the Windows® taskbar and point to **All Programs**.
2. Point to **Click to DVD**, and then click to select **Click to DVD**.

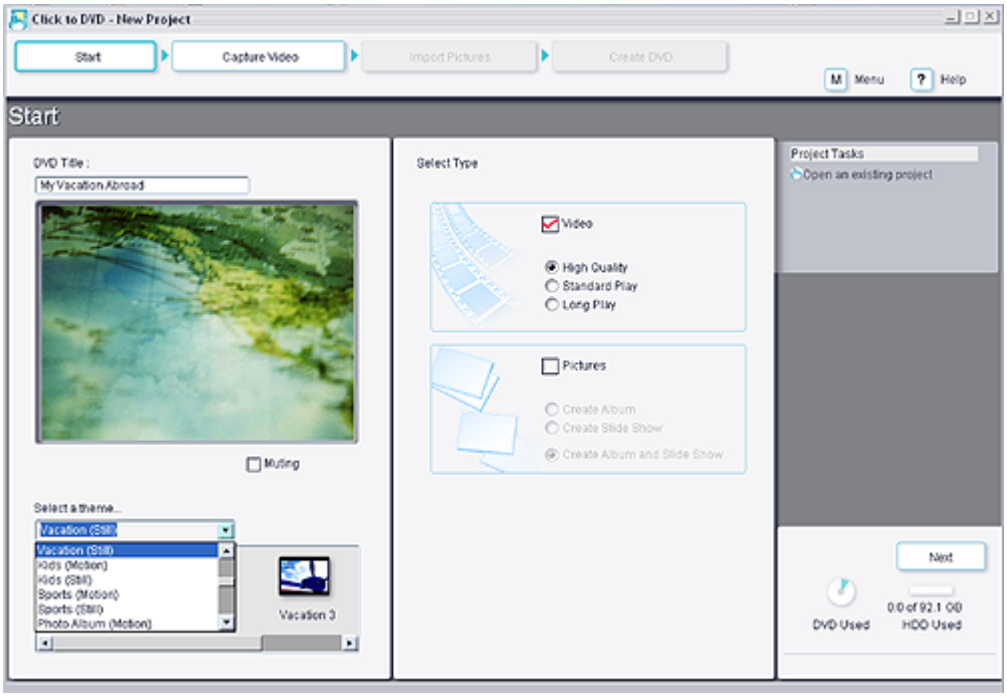
   The **Click to DVD - New Project (Start)** window appears.
3. Connect an i.LINK® cable between the digital video device and the computer, and set the device to VCR/VTR mode.

   For details on how to connect equipment to your computer, see the documentation supplied with the device and your online VAIO® Computer User Guide.

   If the **Digital Video Device** window appears, follow these steps to start Click to DVD software:

   1. Click to select **Create a DVD with movies and pictures**.
   2. Click **OK.** The **Click to DVD -New Project (Start)** window appears.

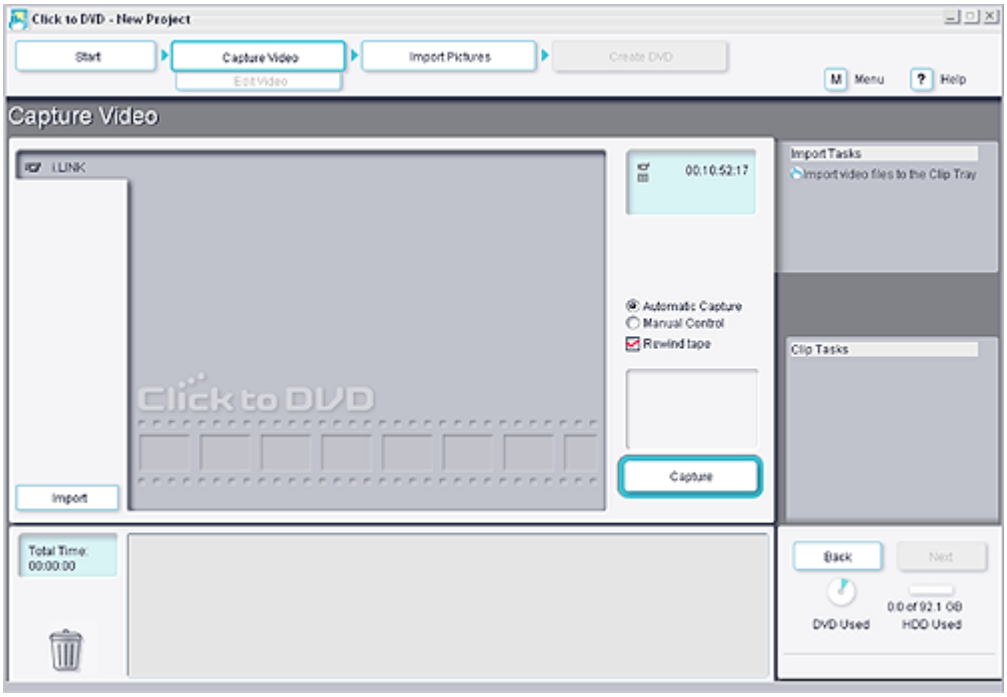
Click to DVD - New Project (Start)



4. Type a title for your DVD in the **DVD Title** box. This text appears in the title window of your completed DVD.
5. In the **Select a theme** area, select a theme from the pull-down menu.
6. Click a theme icon to select the background image and background music. Your selected menu theme appears in the preview window.

   Clear the **Muting** check box to hear the background music. The music becomes part of your DVD regardless of this setting.
7. In the **Select Type** area, make sure to select the **Video** check box and clear the **Pictures** check box.
8. Under the **Video** check box, select one of the three quality options. High Quality video requires more storage space on your DVD.
9. Click **Capture Video**.
10. When the message **Upon completion of video capture, it is not possible to change the picture quality. Are you sure you want to continue?** appears, click **OK**.

Capture Video



11. Select the **Automatic Capture** option and the **Rewind tape** check box.

    With these settings, the Click to DVD software rewinds the tape and then captures all the video clips on the tape.

12. Click **Capture**. To stop capturing at any time, click **Stop Capture**.

    The Click to DVD software rewinds the tape in your DV device and begins capturing all the video clips on the tape. After all the clips are captured, they appear in the clip tray at the bottom of the window.

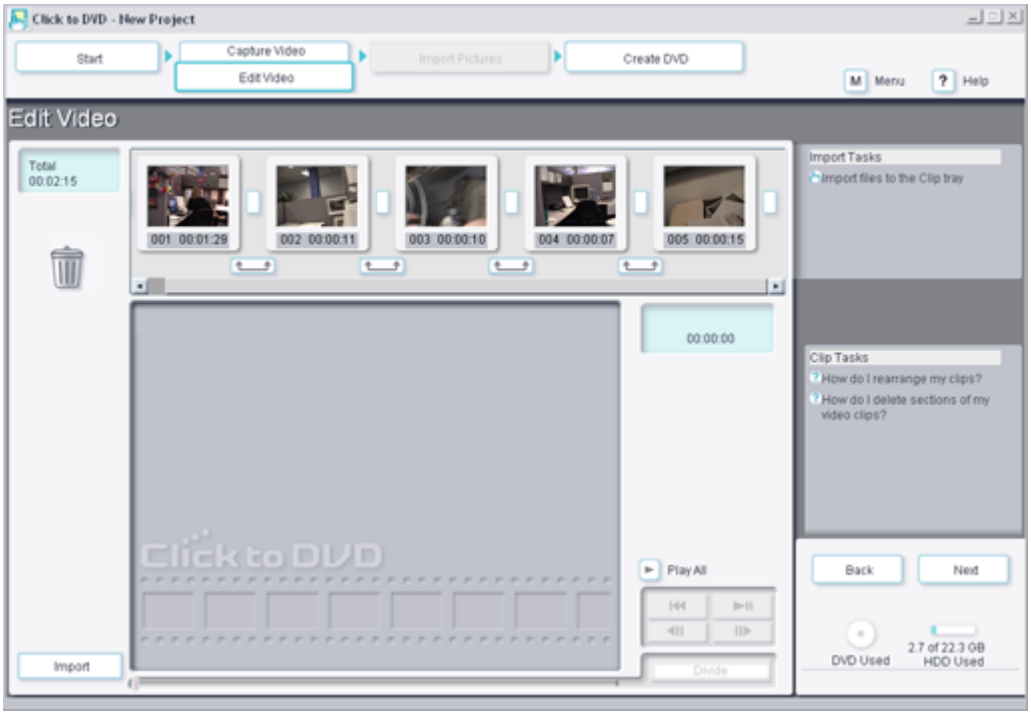
    Each captured clip becomes a chapter on your finished DVD. You can then select the chapters that appear in the chapter windows.

    Capturing continues until the end of the tape or a blank segment of tape is reached.

To edit your video content

To edit your captured clips, click **Edit Video**. The **Edit Video** window appears.

Edit Video



In the **Edit Video** window, your video clips appear in playback order. In this window, you can:

- Delete unwanted clips by dragging them to the **Recycle Bin**.

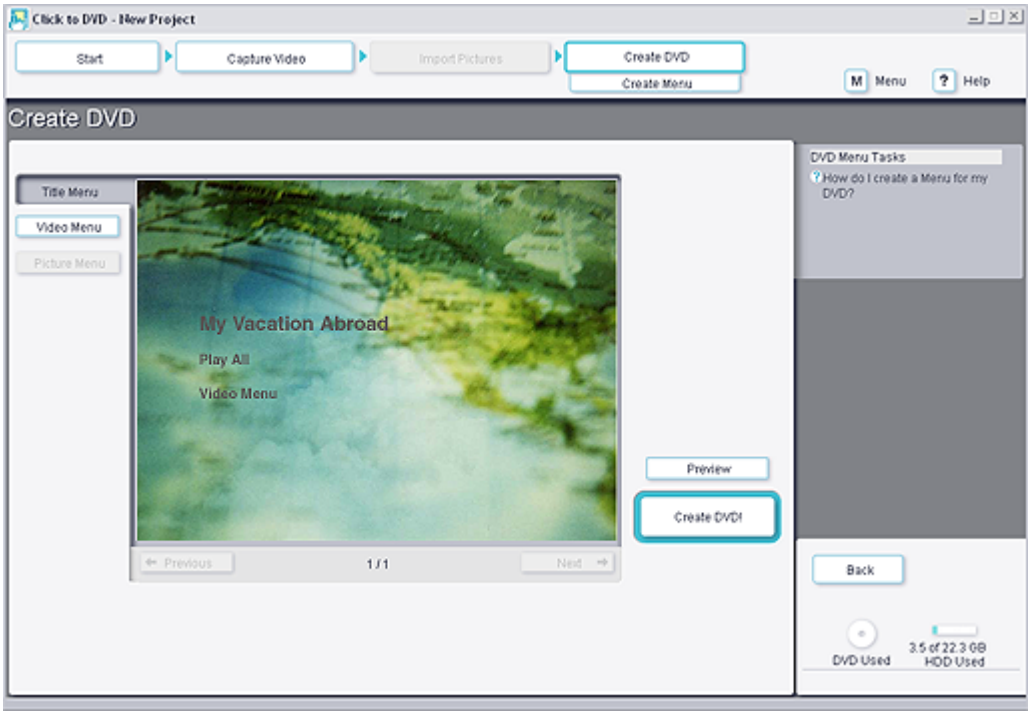
- Drag clips to a new position to change the playback order.
- Divide a clip into two separate clips.
    1. Click to select a clip.
    2. Move the slider to the point where you want to divide the clip.
    3. Click **Divide**.
- Delete unwanted sections of clips by dividing a clip and dragging the unwanted portion to the **Recycle Bin**.
- Combine two clips into one by clicking the **Combine** button between two clips

To set up your DVD

1. Once you have edited and arranged your video clips, click **Create DVD**[1] from the feature buttons located at the top of the window.

   The **Create DVD** window appears.

Create DVD



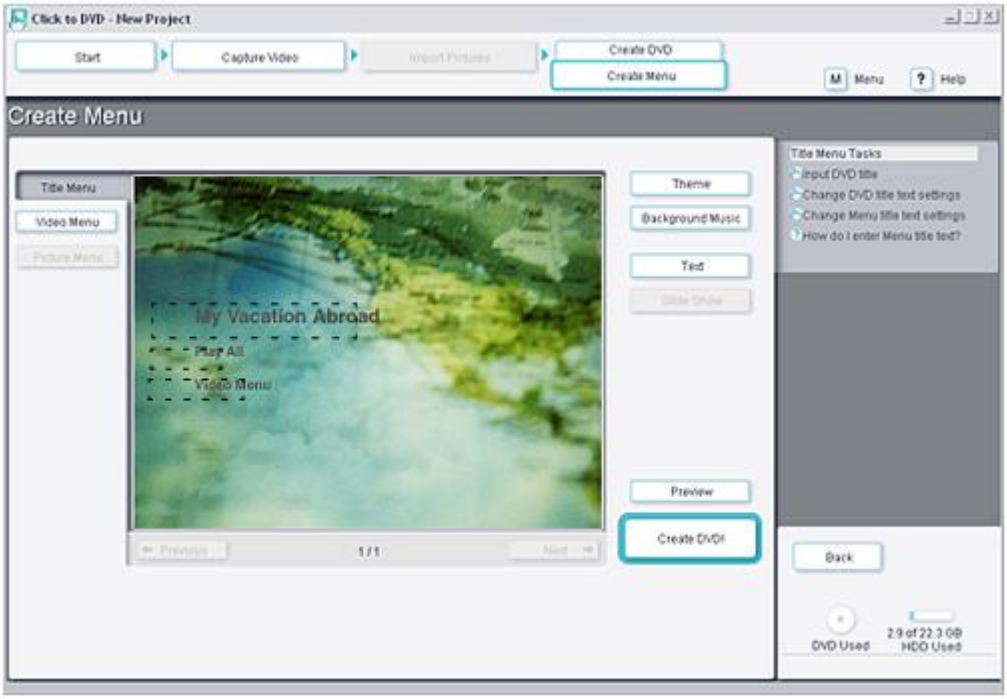
2. To view the title and chapter windows of your DVD, click the **Title Menu** and **Video Menu**.

   Click **Next** and **Previous** to move through multiple chapter windows.

To create a menu

To change the windows of your DVD, click **Create Menu**.

Create Menu



From the **Create Menu** window, you can modify the automatically created windows.

- Click **Title Menu** and **Video Menu** at the left of the window to move between the title window and the chapter windows.
- Click **Theme** to change the background image for the windows.
- Click **Background Music** to change the background music for the windows.
- Click any text in the windows, or in the boxes surrounded with dotted lines, to change the text descriptions of the windows.
- Click **Text** to change the text properties of the windows
- When viewing chapter windows, click **Chapter** to change which chapters on the DVD appear in the chapter windows and to change the thumbnail images that represent chapters in the chapter windows.

To preview your DVD

Before you can preview your video content, the video must be converted to DVD format. Depending on the speed of your computer and the length of the video, it may take some time before the preview feature is available.

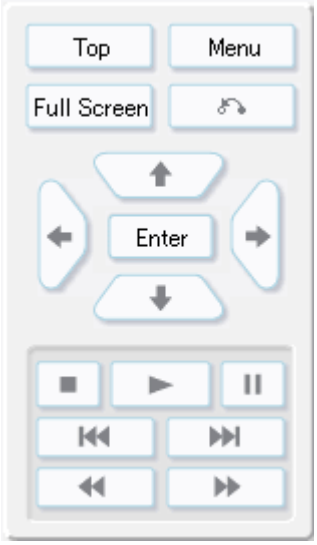
1. Click **Preview** to see the contents of your DVD.

   A window displays the progress of your DVD project for preview. When finished, the **Preview** window appears.

2. In the **Preview** window, view your finished DVD.

   The **Preview** window has controls that enable you to navigate through the video content on your DVD.

Preview window controls



3. After previewing the DVD, click **Close**.

✍ After viewing your DVD, you can make further changes by returning to the **Create Menu** feature.

To burn your DVD

1. When your DVD project is complete, click **Create DVD!** to begin burning the project to a DVD disc.

2. At the message prompt, **Insert a recordable DVD disc into the drive, and click OK to continue**, insert a blank DVD-R, a DVD-RW, a DVD+R, or a DVD+RW disc into your DVD-RW or DVD±RW drive, and then click **OK**.

   The Click to DVD software program begins burning your DVD.

⚠ **Creating a DVD can require several hours to complete. Interrupting the DVD creation process can result in an unusable DVD disc. Sony recommends that you do not use other software applications on your computer while Click to DVD software is burning your DVD.**

While the Click to DVD program is creating a DVD, you may see your computer's hard disk drive access indicator flash repeatedly. This is normal behavior.

3. When Click to DVD software finishes burning the DVD, click **No**.

   The DVD-RW or DVD±RW drive tray opens.

The DVD is now ready for use in a home DVD player or on a computer with a DVD drive and DVD player software.

[1] Do not click Create DVD! at this stage, as this starts the DVD burning process. You are not able to make any changes to your video content once the DVD has been created.

To save the DVD on your computer's hard drive

Save your DVD project to your computer, so that you can edit its contents or create additional copies later.

1. Click **Menu.**
2. Select **Save Project**, type a name for your project in the **File name** field.
3. Click **Save**.

Additional Information

For best results before capturing video clips:

- Configure your computer so capturing is not interrupted.
- Exit all other open applications, and disable screen savers.
- On VAIO® computers equipped with Giga Pocket features, cancel any scheduled timer recording sessions.

For best results while Click to DVD software is capturing clips:

- Do not connect or disconnect i.LINK® or USB cables.
- Do not turn on or turn off i.LINK or USB devices that are connected to your computer.
- Do not attempt to access the Internet or other network services.
- Do not start additional software programs.

About Recording and Playing Music

The Microsoft® Windows® XP operating system and the multimedia software preinstalled on your VAIO® computer make it easy to import, export, organize, play back, and burn music CDs[1].

[1] Unauthorized duplication of audio files is a violation of applicable laws.

Transferring music files to your VAIO computer

You can transfer music to your VAIO computer from many different sources.

- **Audio CDs** — Put your CD into your optical drive and check in songs to your computer's hard drive.
- **From external devices**[1] **using a USB cable** — Connect your external device, such as a Network Walkman® or CLIÉ Handheld, to your VAIO computer and check in the songs to your computer's hard drive.
- **MagicGate Memory Stick media** — For computers with a built-in Memory Stick media slot, transfer songs to and from a MagicGate Memory Stick media.
- **Electronic Music Distribution**[2] **(EMD) services on the Internet** — Download songs from the Internet to your computer's hard drive, using Electronic Music Distribution services.
- **Analog records or casettes —** Use SonicStage Mastering Studio software to bring music from these sources into your computer.

[1] Equipment compatibility may vary. See the documentation supplied with the device for details.

[2] Use of an EMD service requires Internet access and separate subscription to the EMD service. The SonicStage software supports only EMD services compatible with OpenMG technology. Refer to the online Help within the SonicStage software for details.

Using SonicStage Software

SonicStage software is a digital music management system. You can play music on your computer, create custom audio CDs[1], and much more.

- **Play and record music from audio CDs** — Play your audio CDs and record audio tracks to your computer. Combine music tracks into Playlists and check them out to portable music devices.
- **Create custom audio CDs**[2] — Create custom audio CDs from SonicStage Playlists, mixing tracks from different sources and artists.
- **Make backup copies of your audio CDs** — Use SonicStage software's Backing Up Audio CDs utility to create backup copies of your audio CDs.
- **Use Playlists to organize and manage your music** — Organize your music with SonicStage software's Playlist feature. Create lists of songs sorted by artist or genre.
- **Download music from Electronic Music Distribution (EMD) services on the Internet** — Use Electronic Music Distribution services to download music tracks from the Internet, include them in your Playlists, and check them out to your portable digital music devices.
- **Import audio files onto your computer** — Import MP3 and WAV audio files onto your computer to add them to Playlists and record to CD.
- **Turning your computer into a karaoke system** — Use the Vocal Canceler effect to suppress the vocal track from most music during playback.
- **Enjoy a Visualizer light show during music playback** — Enjoy the visual effects while your music plays.

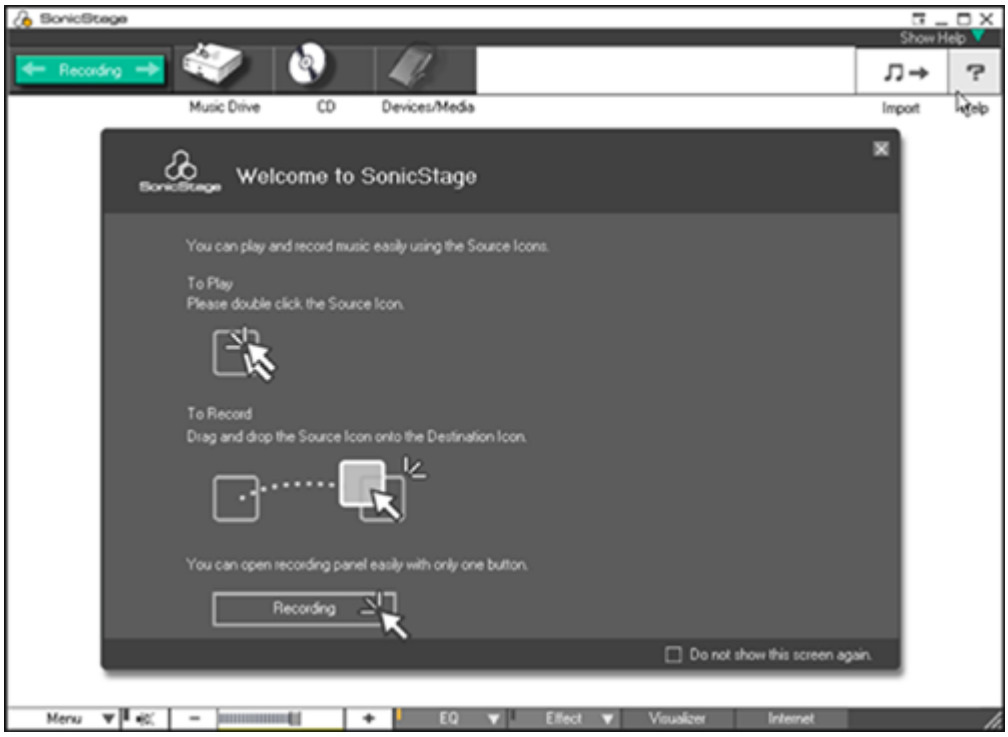
[1] Unauthorized duplication of audio files is a violation of applicable laws.

[2] This feature is available only on computers that have a CD-RW drive.

Starting SonicStage software

1. Click **Start** on the Windows taskbar, and point to **All Programs.**
2. Point to **SonicStage**, and then click **SonicStage**.

SonicStage - Welcome



3. The CDDB® registration window appears. Follow the on-screen instructions to register with the CDDB® service.

   The **Confirm the setup of SonicStage**... dialog box appears.

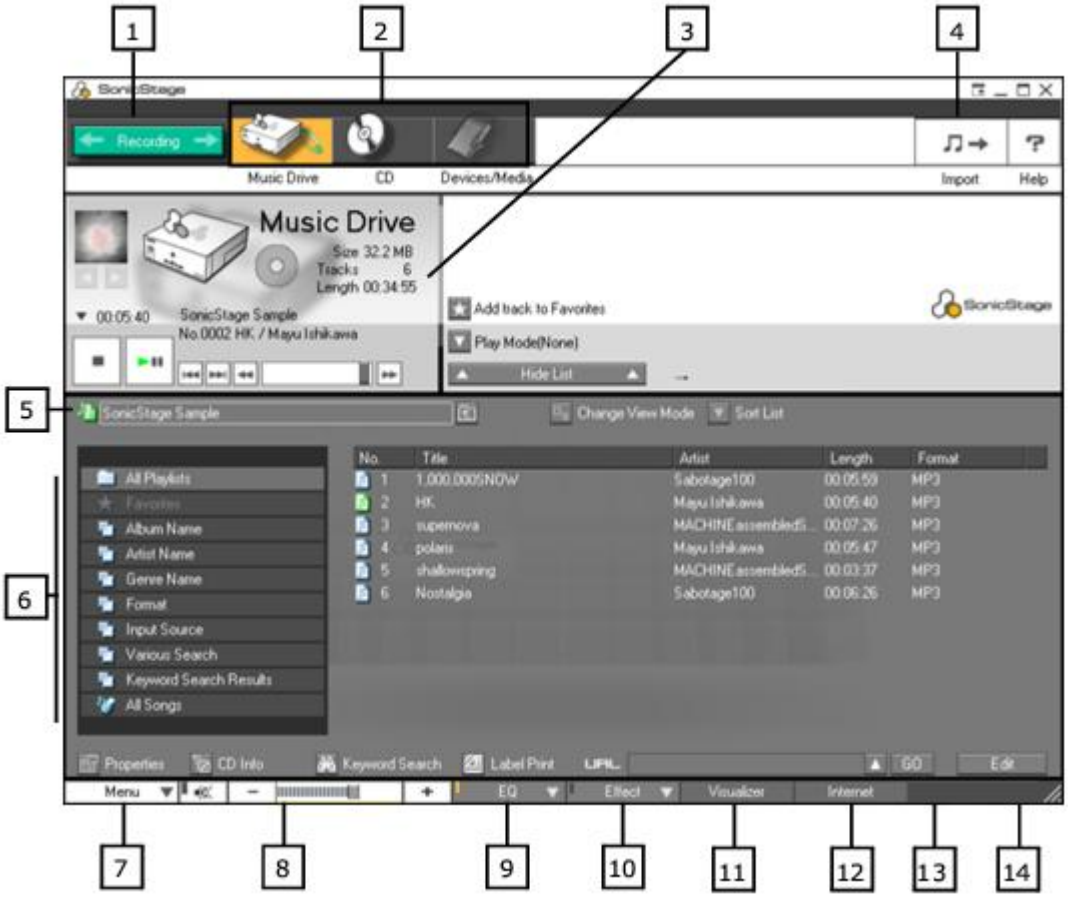
4. Click **Yes** to continue.

The CDDB® (Compact Disc Database) Music Recognition Service registration wizard enables you to register with the CDDB service. You need Internet access from your computer to register and use this service. For more information regarding CDDB registration, click the **Help** button.

To access SonicStage software Help

1. Click **Start** on the Windows taskbar, and point to **All Programs.**
2. Point to **SonicStage**, and then click **SonicStage Help**.

SonicStage features and controls



1 Recording Assistant button

Records or transfers audio files.

8 Volume Control buttons

Controls the volume for playing audio files.

2 Source icons

Changes the window depending on the selected feature.

9 Equalizer button

Adjusts the sound quality and registers new settings.

3 Playback Area (Playlist view)

Depending on the selected source, lets you do different things. Play, pause, stop, fast forward, and reverse with the Player buttons.

10 Sound Effect button

Displays the menu where you can adjust the Vocal Canceller settings.

4 Import button

Displays the Import window, where you can import audio files from the hard disk drive to the Music Drive.

11 Visualizer button

Displays or hides the Visualizer window where you can view images synchronized to the audio file's sound.

5 Content Area (Playlist view)

Displays the playlists in the Categorized List you selected. Double-click a playlist to view its tracks. **12 Internet button**

Displays or hides the Internet window where you can download or stream audio files via EMD services.

6 Categorized List (Tree view)

Displays the playlists stored in the Music Drive by artist name, genre, format, etc. Helps you locate your audio files.

13 Internet address drop-down list (Playlist view)

Displays Internet addresses associated with the currently selected song.

7 Menu button

Displays the SonicStage software's main menu. **14 Switch to Edit Area button**

Switches the Content Area to the Edit Area.

Recording from a CD

You can record songs from audio CDs and add them to playlists in SonicStage software.

When you record from an audio CD from your optical drive for the first time, the **CD Drive Optimization** dialog box appears. Click **Start** to verify your optical drive. After the verification is performed, recording begins.

To record music from a CD

1. Insert an audio CD into your computer's optical drive.

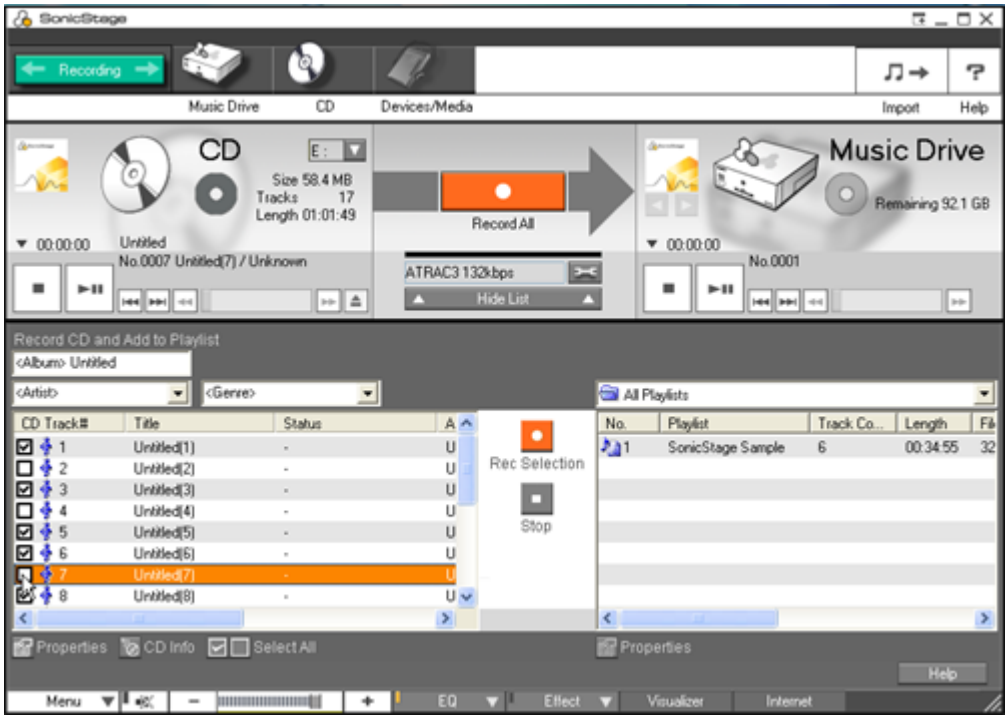
   The Microsoft® Windows® system recognizes the CD, and a window may appear asking you to select an action. Click **Cancel** to close this window.

   When SonicStage software is running and an audio CD is inserted, an Internet connection to the CDDB® service is automatically launched to retrieve artist and track information. An error message is displayed if there is no Internet connection. Follow these steps to disable this function:

   1. Click **Menu**.
   2. Select **CD Settings**.
   3. Clear the **Start playing the CD automatically** check box.

2. Start SonicStage software.
3. When the Main Window appears, click Recording. The **Recording Assistant Window** appears.
4. Select the **CD icon** in the Source box, and then select the **Music Drive icon** in the Target box.
5. Click the **Jump to Record Window** button. The **Record Window** appears.
6. Click Show List to view the List Area of the **Record** window. To select specific files on your CD, click to check or clear the check marks of the tracks on the CD. A check mark indicates you have selected that track for recording.

Record Window



7. Click **CD Info** in the lower-left corner of the Record Window to launch the CDDB service, which names your CD and its song titles.

   Not all audio CDs support the **CD Info** button.

8. Click **Change CD Recording Format** in the Record Window to select a different recording format and bit rate.

9. When recording the audio tracks on a CD, you can:

    1. Click the **Record All** button to record all the tracks on a CD.

    2. Click the **Rec Selection** button to record the specific tracks you checked in the List Area.

10. When the Select **Playlist** window appears, select either **Create a New Playlist** or **Add to Playlist**, and then click **Start Rec**. When the recording is finished, the playlist appears in the **Playlist** window.

Transferring songs (Check-In/Check-Out)

Use SonicStage software to transfer audio files between the playlists stored in the Music Drive on your computer and external devices or media. Transferring files from the Music Drive to the external device or media is called "check-out," while transferring files from the external device or media to the Music Drive is called "check-in."

To check-out songs to an external device

1. Connect the external device or insert the media into your computer.
2. Start SonicStage software.
3. When the Main Window appears, click Recording. Your computer automatically recognizes the connected external device or media and the **Check-In/Out Window** appears.
4. Click Show List to view the List Area of the **Check-In/Out** window.

Check-In/Out window

5. Select the playlist that contains the track that you want to check out. The tracks in the playlist are shown in the **Playlist** view panel.
6. Click the track to select it, or select several tracks by holding down **CTRL** while pointing to each of the tracks you want.
7. Click **Check-Out** to begin the check-out process.

To cancel check-out click **Stop**.

To check-in songs

You must check songs back into the same computer where the songs were checked out.

1. Connect the external device or insert the media into your computer.

   Your computer automatically recognizes the connected external device or media and the Check-In/Out Window appears.
2. Click Show List to view the List Area of the Check-In/Out window.
3. Select a track from the song list of the external device or media. To check in more than one track at a time, hold down the **Ctrl** key and click the additional songs.
4. Click **Check-In**, or drag the tracks onto the Playlist view panel to begin the check-in process. If you want to

check in all of the tracks in the external device or media, click the **Check-In All** button.

To cancel check-out, click **Stop**.

To make a backup copy of an audio CD

On computer models equipped with a CD recording device, you can use the **Backing Up Audio CDs** utility to make a backup copy of an audio CD.

On computer models that have both a read-only optical drive and an optical writing drive, you can make a copy with one click.

On computer models with only one optical drive, you must swap the original CD for a blank CD-R disc when requested to do so in the middle of the copying process.

1. Click **Start** in the Windows® taskbar, and point to **All Programs.**
2. Point to **SonicStage** and click the **SonicStage Backup Tool**.
3. Insert the music CD into the optical drive you use to read CDs. Depending upon your computer model, this could be a CD-ROM drive, CD-RW drive, a DVD-ROM drive, a DVD-RW drive, or a Combo Drive.

   On computer models that have both a read-only optical drive (CD-ROM or DVD-ROM) and an optical writing drive (CD-RW or DVD-RW), put the CD into the read-only optical drive.
4. Select your CD drive in the **Retrieve from** drive list.
5. On computer models that have both a read-only optical drive (CD-ROM or DVD-ROM) and an optical writing drive (CD-RW or DVD-RW), select the optical writing drive in the **Write to** drive list.
6. Click **Start**.
7. If a **Reading complete** message appears, remove the original source CD from the optical writing drive and insert a blank CD-R disc.
8. Click **OK**.

Additional features

- **SonicStage Backup Tool**

  You can back up and restore music, graphics, and information data managed by SonicStage software. You must be connected to the Internet to use the SonicStage Backup Tool.

- **Import audio files in various formats**

  You can import audio files in various formats, such as the ATRAC3 , ATRAC3plus , MP3, or WAV standards. You can also import audio files that comply with the Microsoft® Windows Media® Technologies (WMT) standard, identified by .asf or .wma extensions. Manage your audio files through the Playlist feature of SonicStage software.

- **Manage imported songs on the playlist**

  Additional features are available when you register your imported songs through the Playlist feature of the SonicStage software. You can manage your music by creating your own list of songs categorized by genre or artist, displaying your song list in the Playlist feature, and arranging your songs in a customized order using the Playlist folders. Edit your music by combining multiple songs into a single song, or divide one song into two, by using the Combine and Divide features.

- **Simple mode**

  The main SonicStage window viewed in Simple mode, is a smaller, compact version of Full mode. This may be convenient when you want to listen to music with SonicStage software, while using other applications, or whenever you feel the Full mode view is intrusive. The Simple mode feature enables you to perform playback operations only.

Using SonicStage Mastering Studio Software

SonicStage Mastering Studio software enables you to record songs[1] from analog records or cassette tapes to save to your computer's hard drive. From your computer, you can burn the songs to CD-R or CD-RW discs, or create audio files in WAV format.

[1] Unauthorized duplication of audio files is a violation of applicable laws.

To start SonicStage Mastering Studio software

1. Click **Start** on the Windows® taskbar, point to **All Programs**
2. Point to **SonicStage Mastering Studio** and click **SonicStage Mastering Studio**.

To access the SonicStage Mastering Studio software Help

1. Click **Start** on the Windows taskbar, point to **All Programs**
2. Point to **SonicStage Mastering Studio** and click **SonicStage Mastering Studio Help**.

To access the SonicStage Mastering Studio Tutorial

1. Click **Start** on the Windows taskbar, point to **All Programs**.
2. Point to **SonicStage Mastering Studio**, and click **Tutorial**.

About Still Images (Photos)

The Microsoft® Windows® XP operating system and the multimedia software preinstalled on your VAIO® computer make it easy to import, edit, print, and customize your still images.

Transferring still images to your VAIO computer

There are a variety of ways to bring still images into your computer using a digital camera or a traditional film camera.

- **Digital camera and Universal Serial Bus (USB) cable** — Many digital cameras can connect directly to your computer using a USB cable. The Windows XP operating system enables you to import pictures from many USB digital cameras.

  If your digital camera does not have a USB connection or is not supported by the Windows XP operating system, refer to the documentation supplied with your camera for details on how to connect your camera to your computer and transfer images.

- **Memory Stick® or other data storage media** — Some digital cameras store pictures on Memory Stick or other media. You can copy your photos from the storage media directly to your computer's hard disk drive.

- **From a scanner** — A scanner is a device that "takes a picture" of your still images and stores them as files on your computer. The Windows XP operating system is compatible with many popular scanners. For scanners not supported by the Windows® XP operating system, follow the instructions in the documentation supplied with your scanner.

- **From a commercial film developer** — Many companies that develop traditional film can provide a CD-ROM or floppy disk containing digital copies of your photos. Consult your film developer for details.

Editing still images

You can use preinstalled software to perform traditional editing tasks such as resizing, cropping, and altering colors. You can add your own creative touch by customizing and combining multiple photos into albums, calendars or labels, using PictureGear Studio software.

Using PictureGear Studio Software

PictureGear Studio software has easy-to-use features that enable you to quickly load images from a digital camera or camcorder, print high-quality photos, create custom labels, and design personalized photo albums or binders to share with family and friends.

Photo albums, binders, and photo collections can only be viewed or edited using PictureGear Studio software. To share a PictureGear Studio software creation either print your creation or use the Export feature to send it to another computer. See the section, To export a photo album.

To access the PictureGear Studio software's Help

1. Click **Start** on the Windows® taskbar and point to **All Programs**.
2. Point to **PictureGear Studio** and click **PictureGear Studio Help**.

Starting PictureGear Studio software

1. Click **Start** on the Windows® taskbar and point to **All Programs**.
2. Point to **PictureGear Studio** and click **PictureGear Studio**.

   The **PictureGear Studio** main window appears.

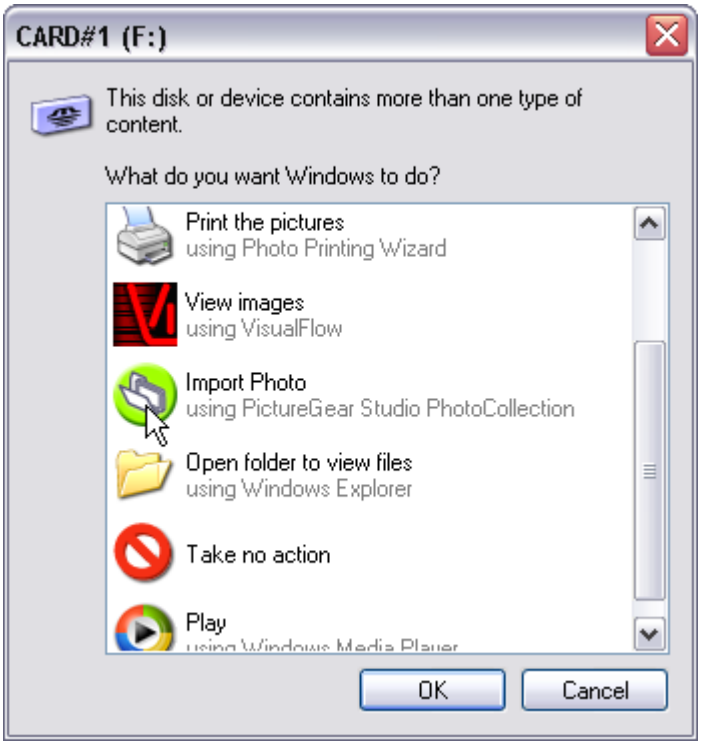
PictureGear Studio main window

Importing photos

Capture and import the pictures from your digital camera or camcorder to your computer. You can select your favorite pictures and place them in folders for future use.

When you initially connect your digital camera, camcorder or insert a Memory Stick® media, Windows® XP operating system may attempt to recognize the device or media. An identification window may appear. To continue using PictureGear Studio software, you can close this window as follows:

Windows XP identification window (Memory Stick® media)

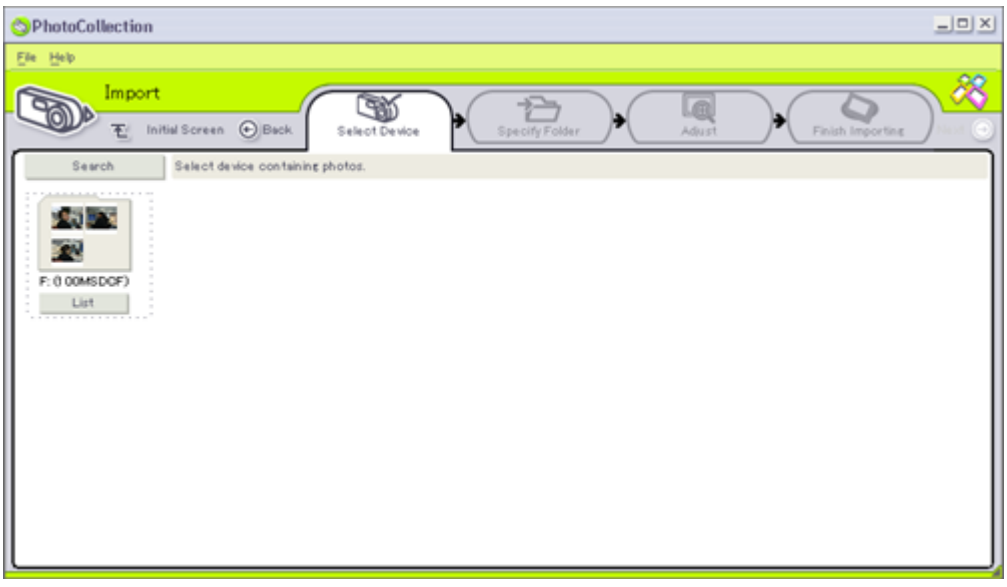


- Click **Cancel** to close the window.
- Select **Take no action**, and then click **OK**. The window closes.

To import photos with the Import Photo feature

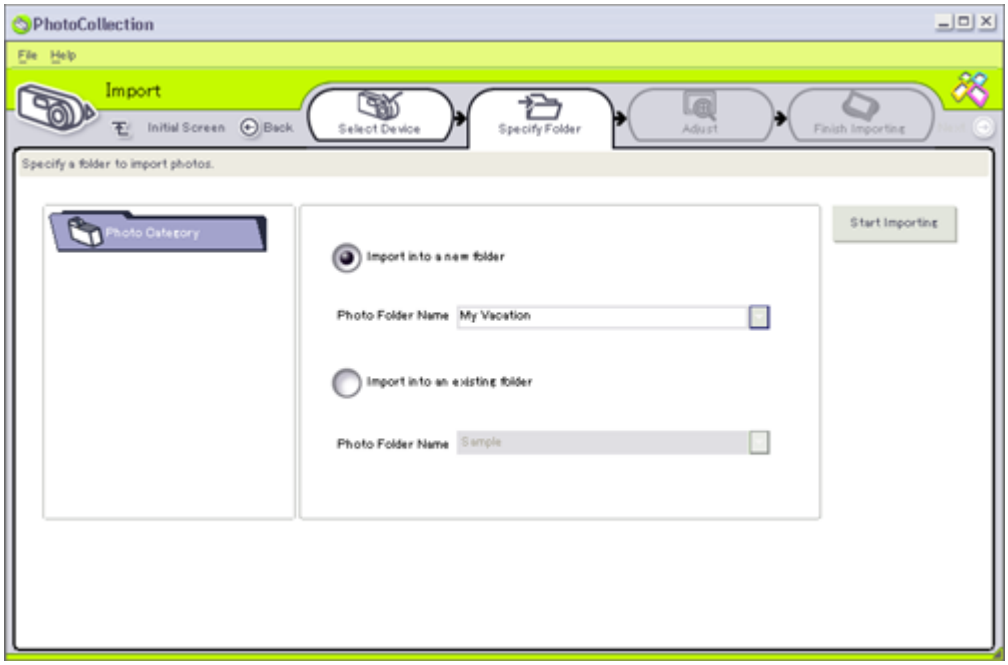
1. Connect your digital camera or camcorder to your computer, or insert your Memory Stick® media into the appropriate slot.
2. Select **Import Photo using PictureGear Studio PhotoCollection**, to proceed directly to the **PhotoCollection Import** window.
3. Click **Import Photo**. Your connected digital camera, camcorder, or Memory Stick® media is displayed in the Select Device window.

Select Device window



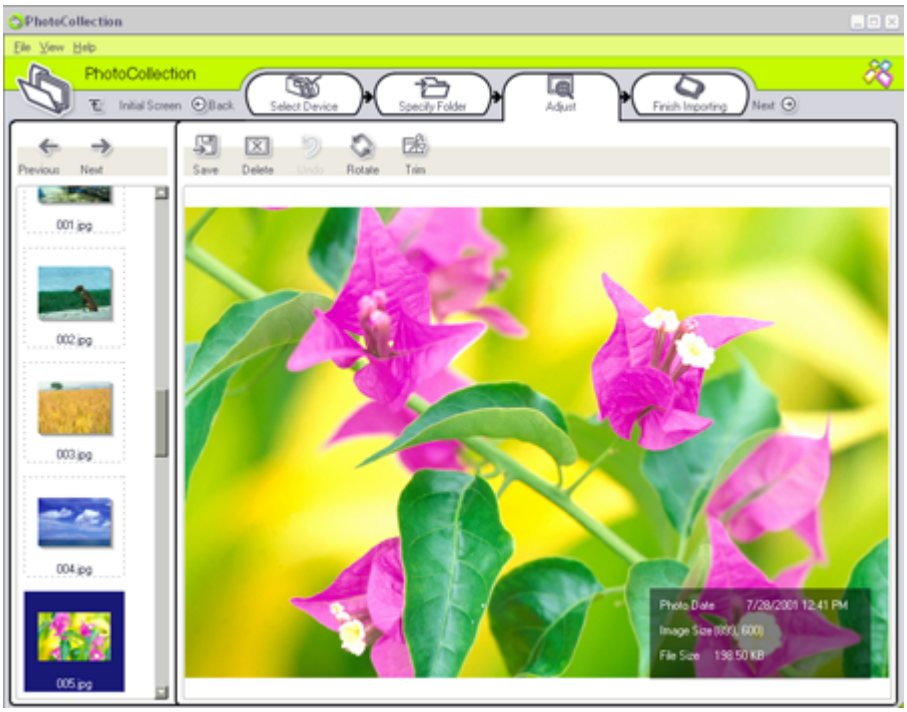
4. Click **List** to view all pictures that are located on the device or media. Make your selections and click **Import Selected Photos**.

Specify Folder window



5. Select a folder option. If you are importing to a new folder, type in the folder name before clicking **Start Importing**.

Adjust window



6. The Adjust window displays an enlarged version of the picture on the right and thumbnail versions on the left. Use any of the following buttons to adjust your picture.

   - **Save —** Use this to move the picture to a new folder.
   - **Delete** — Use this to remove the picture from the photo collection.
   - **Rotate** — Use this to change the picture's position.
   - **Trim** — Use this to crop the picture or capture a specific area.

7. Click **Finish Importing** to save the imported pictures in a photo collection.

Organizing your digital photo collections

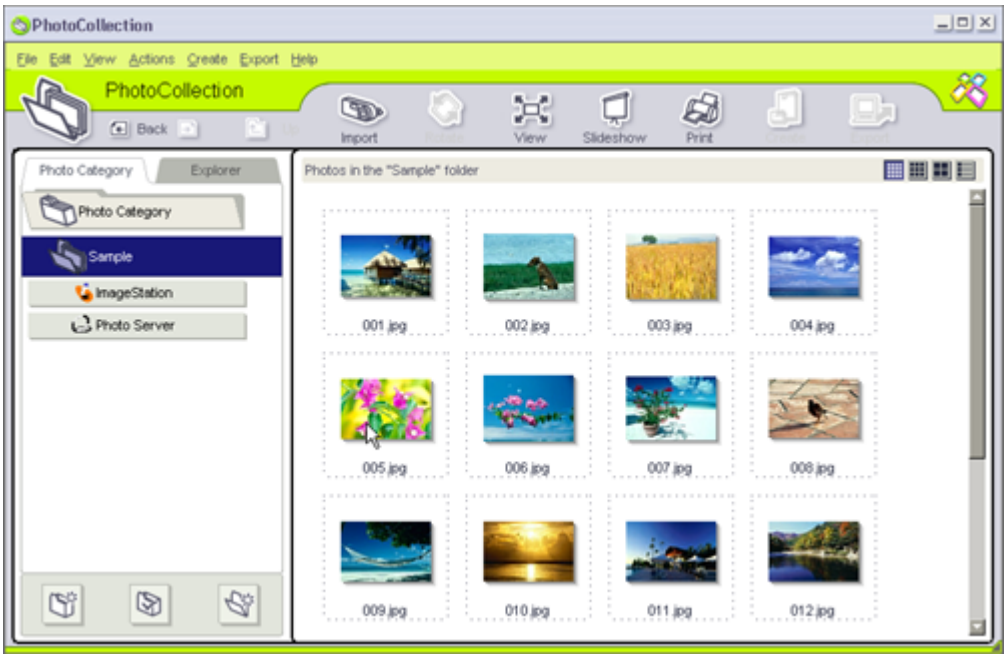
You can organize and manage your imported pictures on your computer's hard drive or from your ImageStation® account.

To organize your photos with the PhotoCollection feature

1. Click **PhotoCollection** from the PictureGear Studio software's main window.

   A list of available photo sources is displayed on the left, with the selected source's contents displayed as thumbnail pictures on the right.

PhotoCollection window



2. From the thumbnail view, click to select pictures.

   Hold down the **Ctrl** key while clicking, to select several pictures. Press the **Ctrl+A** keys to select all of the photos in a folder.

   Manage your pictures with these additional tools and features:

   - **Rotate** — Use this to change the picture's position.
   - **View** — Use this to enlarge a thumbnail view.
   - **Slideshow** — Use this to place the selected pictures into an organized slide show, customizing the Slideshow settings with the icon toolbar at the top of the Slideshow window.
   - **Print —** Use this to set up your photos and select paper to make prints.

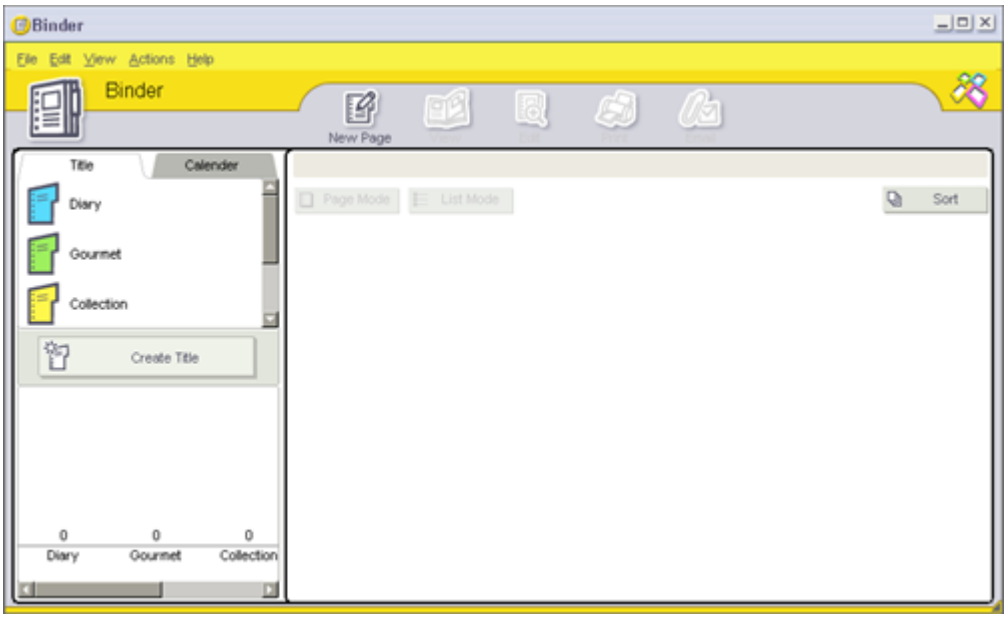
Creating electronic binders

You can add comments to your favorite photos, add custom backgrounds, clip art, and stamps, or showcase your own drawing talent. Add, remove, or change your designs to create your own unique photo art.

1. Click **Binder** from the PictureGear Studio software's main window.

   A list of binder styles is displayed on the left. When you add your pictures to a binder, they appear as thumbnails on the right.

Binder window



You can create your own custom binder styles by clicking **Create Title**.

2. Select a binder style, and then click **New Page**. Available photo sources are displayed as thumbnails.
3. Click a photo to select it. An information form appears.
4. Fill in your information and click **OK**. The art palette window appears.

   To create an original page with art or stamps, use the decoration features on the right by clicking on the desired feature and applying it to your photo.

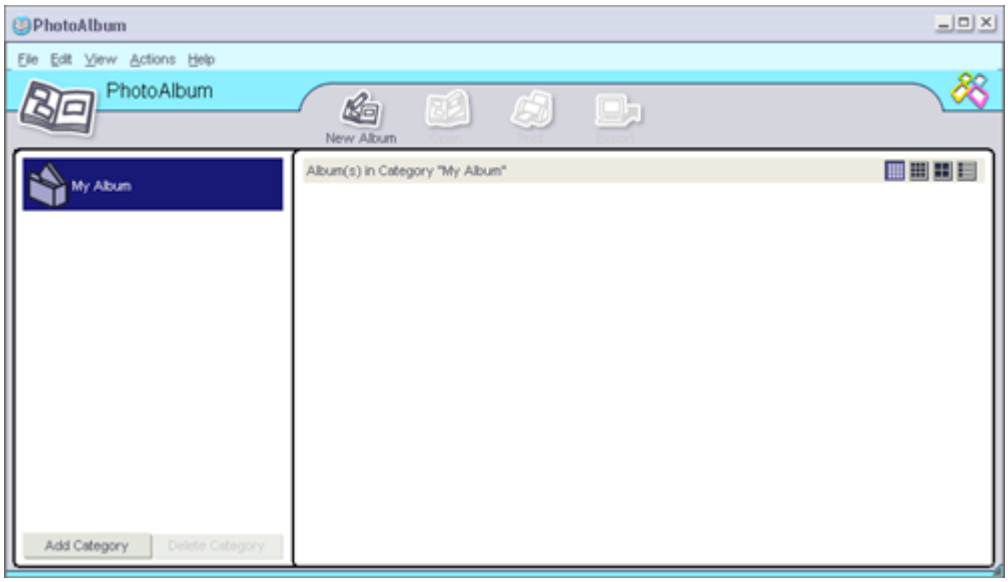
5. Click **Save** to add the new page to your binder.

Creating digital photo albums

Organize your memorable photos in an electronic photo album. You can share your custom photo albums with friends and family

1. Click **PhotoAlbum** from the PictureGear Studio software's main window.

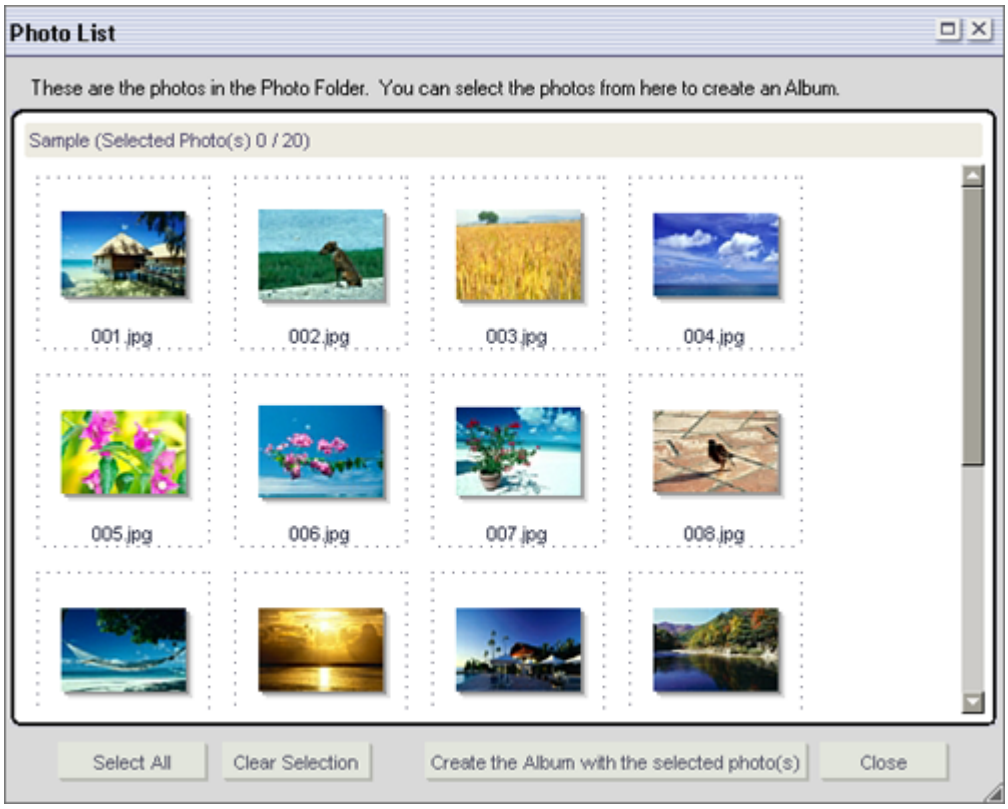
PhotoAlbum window



2. Click **New Album**. The **Select Photo** area appears.

3. To select the photos you want to include in your album from available folders, click **List**.

Photo List window

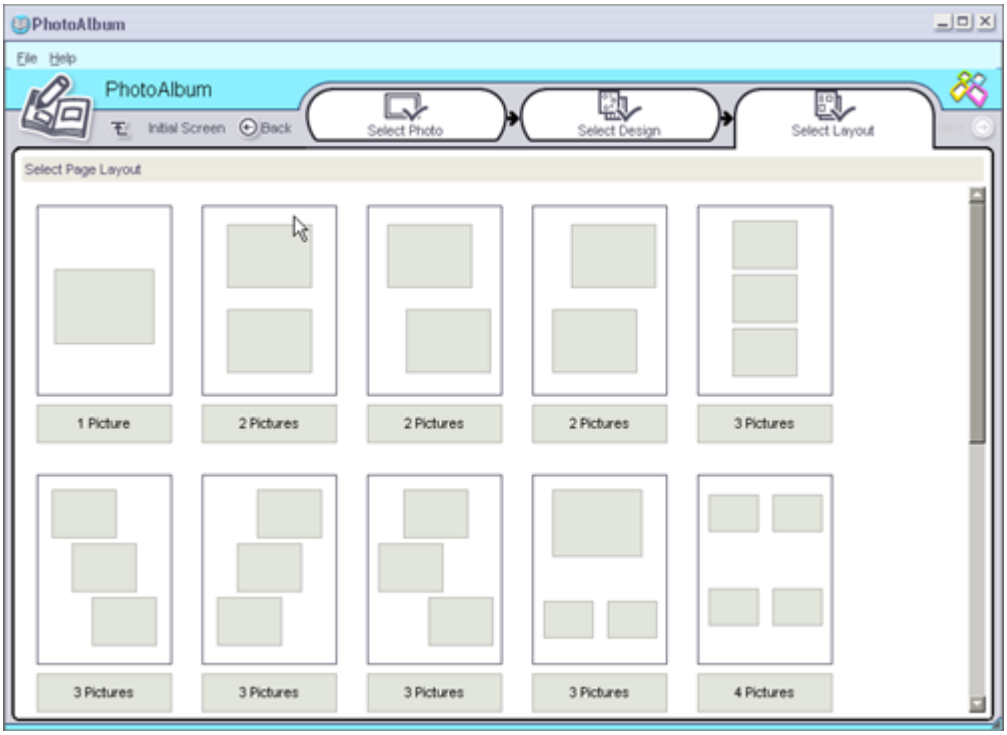


4. Click **Create the Album with the selected photo(s)** after making your picture selections.

Select Design window

5. Click to select a design layout for your album. Use the scroll bar to view all available album designs.

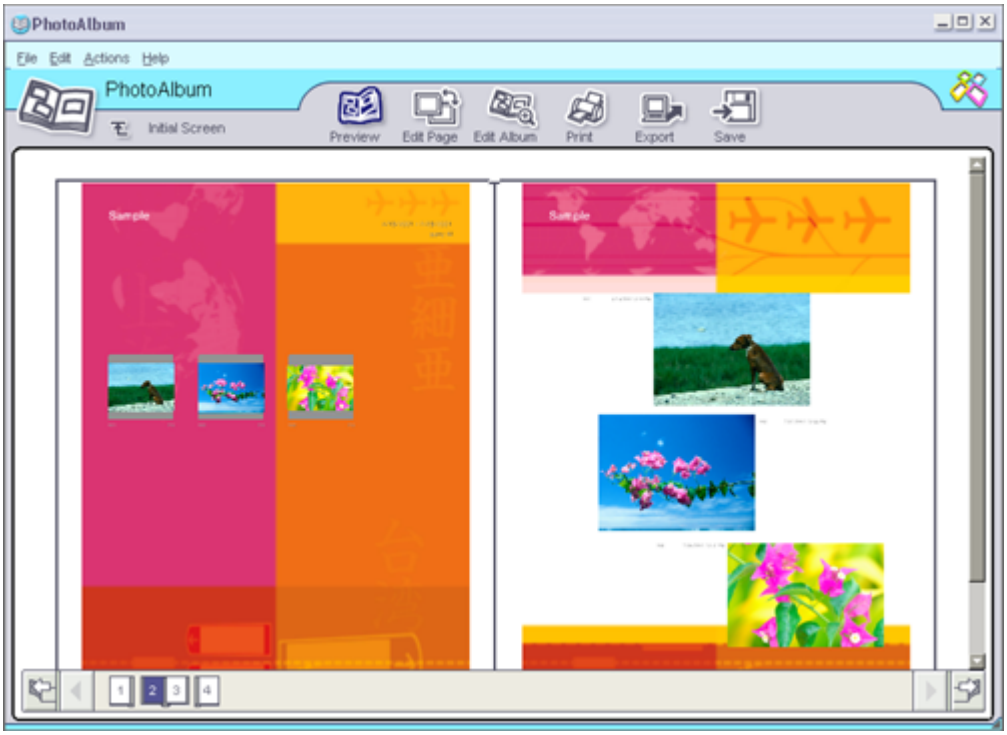
Select Layout window



6. Click to select a page layout for your album. Use the scroll bar to view all available layout designs.

   Scroll through your album using the book icons at the bottom of the window.

Album preview window



7. Click **Edit Album** to make changes to your album. Customize your album by adding more pictures, pages, decorations, or comments, or by deleting pages.

   Click **Edit Page** to customize a page in your album. You can customize with your own drawing, stamps or other decorations.

8. Click **Save**.

9. Enter a name for your album and click **OK**.

Sharing your digital albums

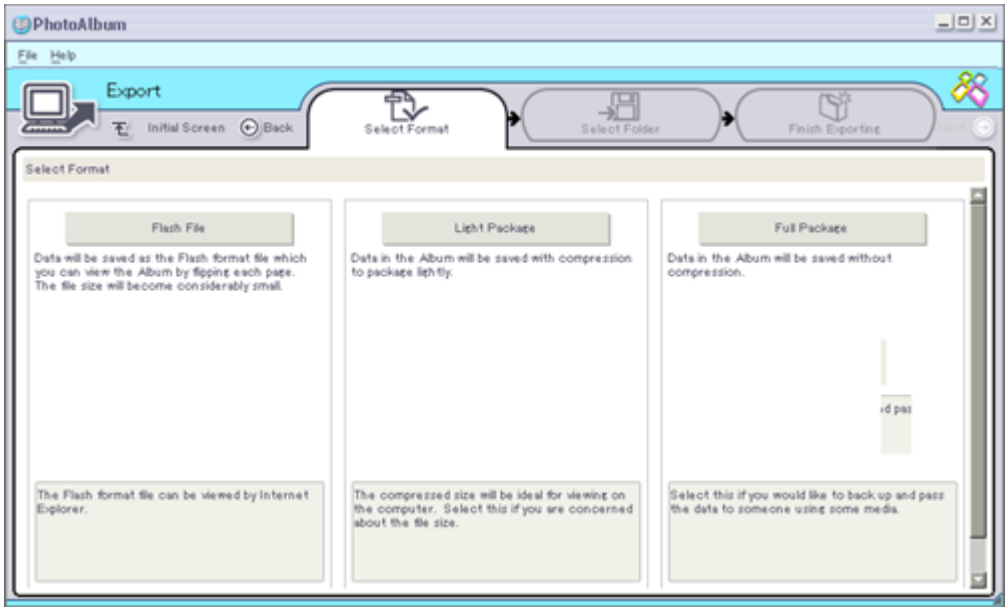
To share your albums with friends and family, you can use three export formats:

- Export the album as a **Flash File**. This creates a .swf file that you can view using Microsoft® Internet Explorer.
- Export as a **Light Package**. This creates a compressed file that you can view on a computer.
- Export as a **Full Package**. This creates an uncompressed file to be saved to recordable media, such as a CD-R/CD-RW or Memory Stick® media.

To export a photo album

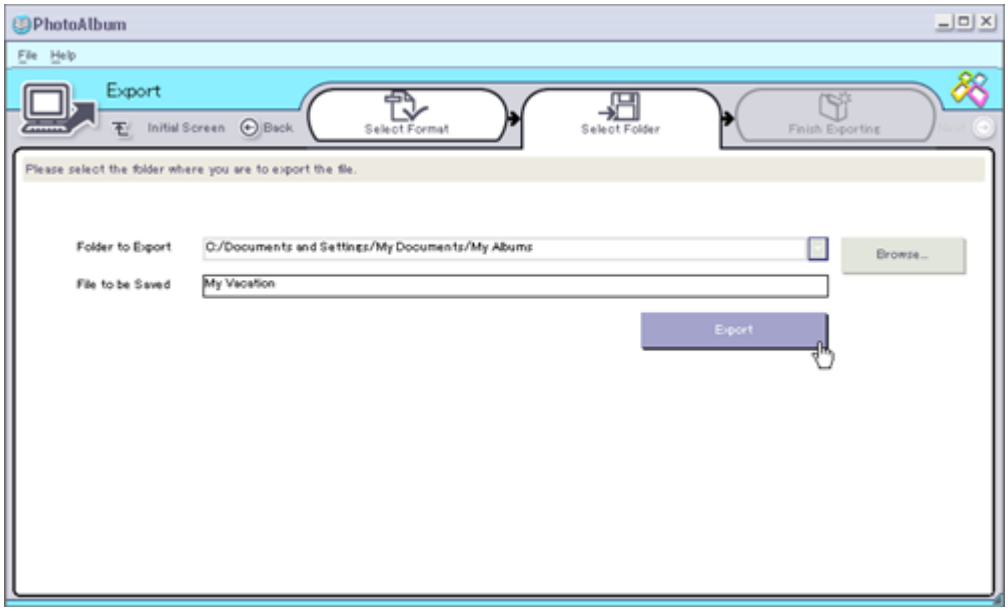
1. With a a photo album open, click Export.

Select Format window


PhotoAlbum
File Help
Export
Initial Screen
Back
Select Format
Select Folder
Finish Exporting
Select Format
Flash File
Light Package
Full Package
Data will be saved as the Flash format file which you can view the Album by flipping each page. The file size will become considerably small.
Data in the Album will be saved with compression to package lightly.
Data in the Album will be saved without compression.
The Flash format file can be viewed by Internet Explorer.
The compressed size will be ideal for viewing on the computer. Select this if you are concerned about the file size.
Select this if you would like to back up and pass the data to someone using some media.

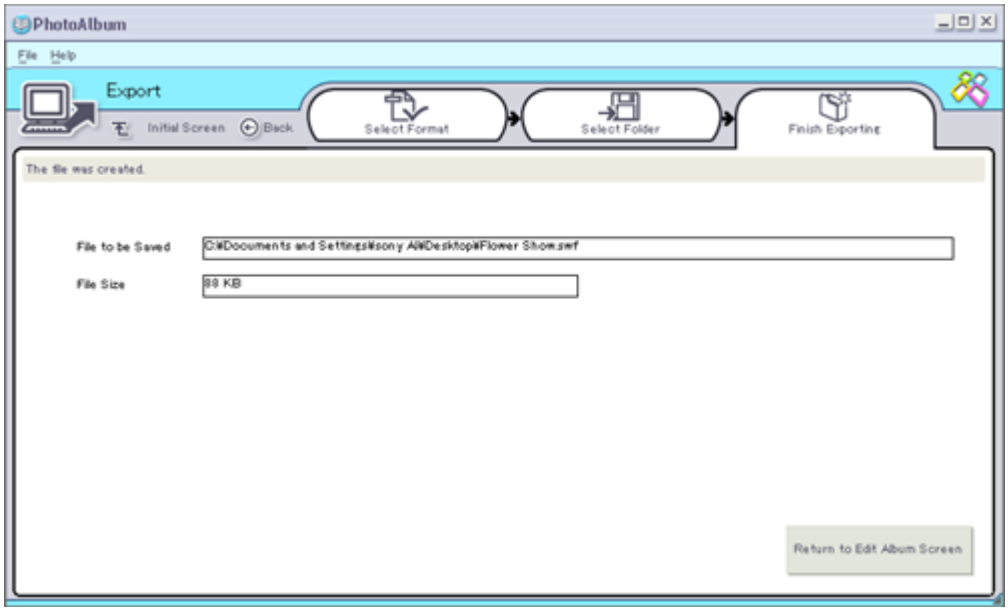
2. Click to select an export format.

Select Folder window



3. Click **Browse** and navigate to the destination folder. Enter a file name.
4. Click **Export**. A progress window appears briefly.

Finish Exporting window



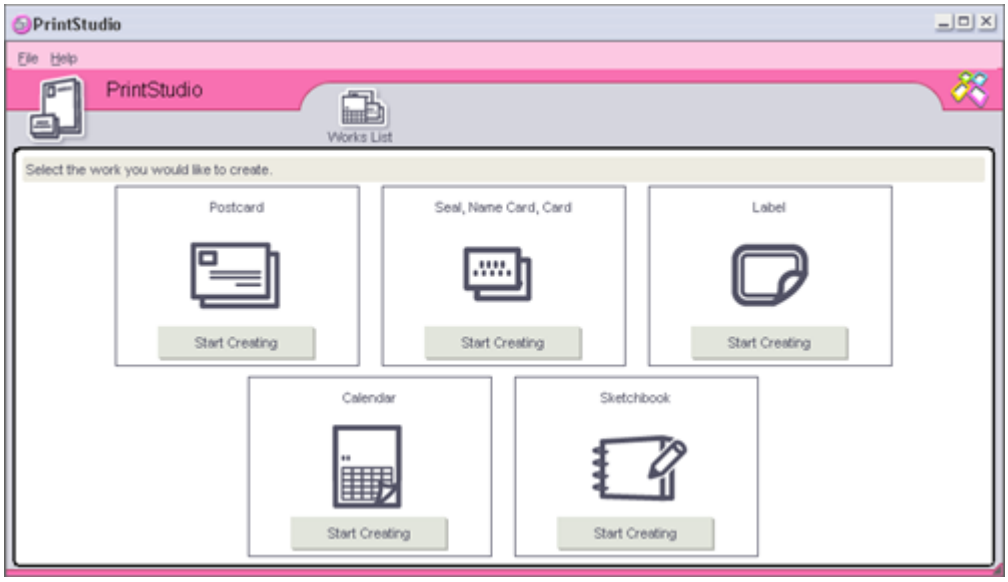
5. An export completion message window appears, displaying the file name and file size. Click **Return to Edit Album Screen**.

Designing Postcards and other customized products

Use PrintStudio to design original postcards, calendars, art, and labels using your favorite still images.

1. Click **PrintStudio** from the PictureGear Studio software's main window.

PrintStudio window



2. Select the item you want to create and click **Start Creating**.
3. Make selections for the pictures, design layout, and custom decoration for the item you want to create.
4. Set the number of copies to be printed and select a connected printer. Click **Print**.

Use the appropriate paper when creating postcards, labels or business cards.

About Preinstalled Image-editing Software

Your VAIO® computer has other image-editing software preinstalled, depending on the system configuration purchased. For details on your preinstalled software titles, see the online or hardcopy specifications sheet.

Using Adobe Photoshop Elements software

Adobe® Photoshop® Elements software is an image-editing software that is preinstalled on certain VAIO® computers. It has a wide assortment of tools for enhancing your images and offers extensive online help to enable you to make the most of your still images.

1. Click **Start** on the Windows® taskbar and point to **All Programs**
2. Point to **Adobe**, point to **Photoshop Elements**, and then click **Adobe Photoshop Elements**.

To access the Adobe Photoshop Elements software's Help

1. Start **Adobe Photoshop Elements** software.
2. From the **Help** menu, click **Help Contents**.

Using Microsoft Paint software

Microsoft® **Paint** software provides basic image-editing features.

To start Microsoft Paint software

1. Click **Start** on the Windows taskbar and point to **All Programs.**
2. Point to **Accessories** and then click **Paint**.

To access Microsoft Paint Help

1. Start the Microsoft **Paint** software.
2. From the menu, click **Help**.

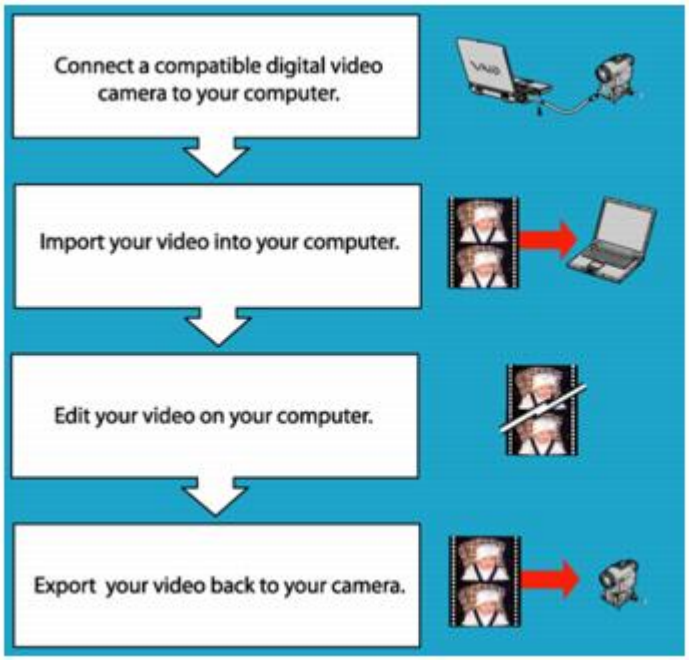
About Video Editing

The multimedia software preinstalled on your VAIO® computer makes it easy to import and edit videos from compatible digital video (DV) devices or MICROMV cameras, that have an i.LINK® connector.

You can edit your video creations, export them back to your video camera, or save them as files on your computer or storage media.

DVgate and **DVgate Plus** software give you advanced and powerful video import and export features, precise editing capabilities, and preserves the quality of your digital data.

The Video Editing Process


Connect a compatible digital video camera to your computer.
Import your video into your computer.
Edit your video on your computer.
Export your video back to your camera.

Transferring video content to your VAIO computer

Before you can start creating your video on your VAIO® computer, you need to transfer it from your DV device to your computer.

- **Digital Video device and i.LINK® cable** — Many digital video devices can connect directly to your computer using an i.LINK cable. The Windows® XP operating system enables you to import video from your DV device.

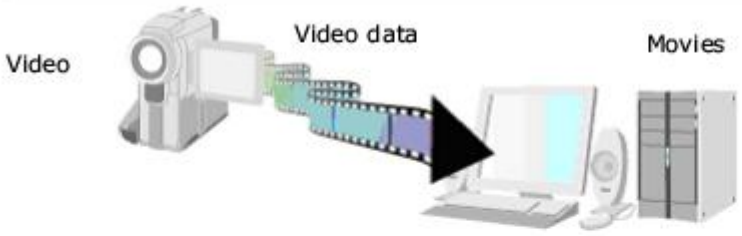
- **Memory Stick® or other data storage media** — Some DV devices store pictures on Memory Stick or other media. You can transfer your video from the storage media directly to your computer's hard disk drive.

Using DVgate Plus Software

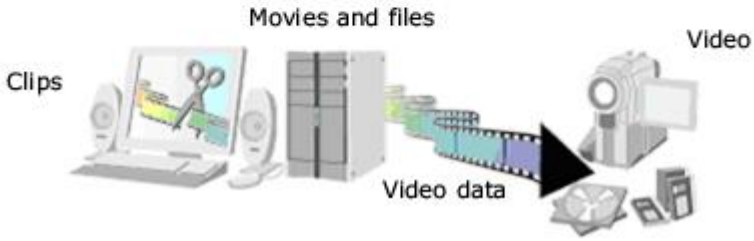
DVgate Plus software enables you to transfer video content from your DV device to your VAIO® computer. You can format your video into movies, and then save it on your computer's hard drive or record it back to your to your digital video camera.

DVgate Plus software's flow

From your DV device to your VAIO computer



From your VAIO computer to file or back to the DV device



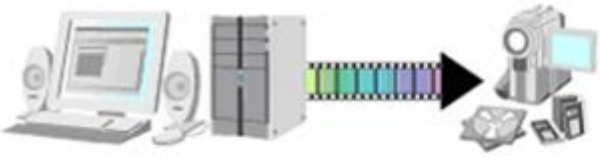
DVgate Plus software main features

Capture and Output features

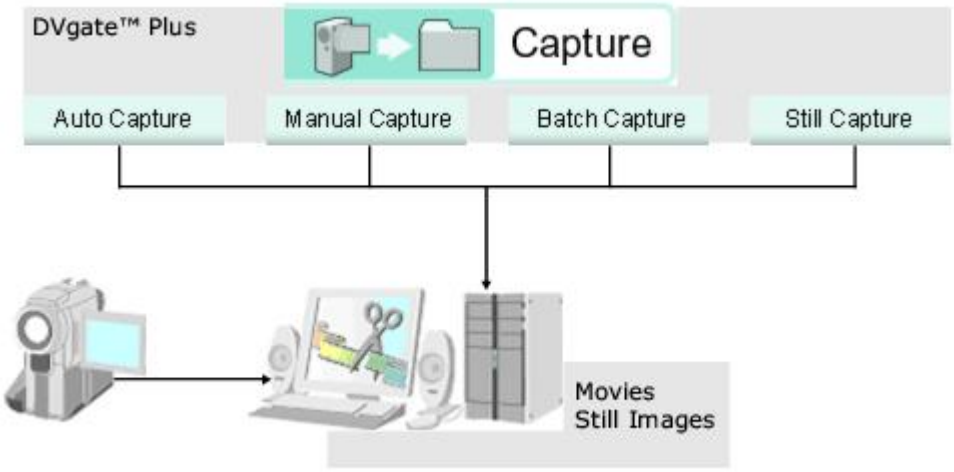
Capture Feature

Auto Capture mode — Captures all of the video content.
Manual Capture mode — Captures selected scenes.
Batch Capture mode — Divides the video content into scenes before capture.
Still Capture mode — Captures still images.

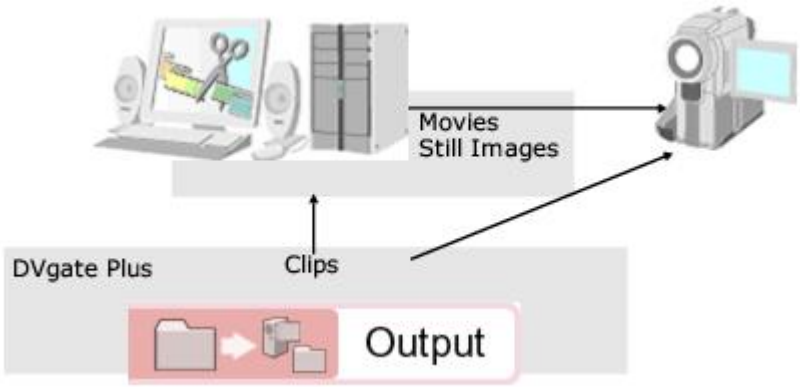
Output Feature



Capture Modes (detail)



Output feature (detail)



For details on how to connect your digital video camera to your computer, refer to the documentation supplied with camera or the online VAIO® Computer User Guide.

To access the DVgate Plus software Help

1. Click **Start** on the Windows® taskbar and point to **All Programs**
2. Point to **DVgate Plus** and click **DVgate Plus Help**.

Starting DVgate Plus software

1. Click **Start** on the Windows® taskbar and point to **All Programs**
2. Point to **DVgate Plus** and click **DVgate Plus**.

To capture digital video (automatic mode)

1. After starting DVgate Plus software, click **Cancel** to close the **Mode Select Guide**.
2. Confirm that the **Capture Mode** is active. If you are in **Output Mode**, click **Go to Capture Mode**.
3. Click **DV Device Selection**.
4. Select the **Auto Capture** tab.
5. Review the tape's contents using **Review Tape** and **External Device Control**.
6. Select a format for the files in the **Capture Settings** window.

   To display the Capture Settings, click the **Settings** menu and select **Capture**.
7. Click **Capture**.

   To change the file destination folder, click **Browse** and select the desired folder.
8. Type the file name, the software adds the second half of the file name as a 3-digit number.
9. Click **OK**.
10. Video capture begins. Progress is displayed in the **DV - Auto Capturing** window.
11. When the capture finishes, view the results in the **Auto Capture Results** window.
12. Confirm the displayed contents, and click **OK**.
13. To save the Scene List, click **Save**.
14. Type in the file name and click **Save**.

Transferring video content to your computer

1. Start **DVgate Plus** software.
2. Click **Cancel** to close the **Mode Select Guide**.
3. Confirm that the **Output Mode** is active. If you see **Capture Mode**, click **Go to Output Mode**.
4. Click **HDD Output Device**.
5. From the **Clip List**, select the clips you want.
   - To select multiple clips by clicking them while holding down the **Ctrl** key.
   - To rearrange clip order by dragging the clip to the desired location in the **Clip List**.
   - To select continuous clips in the list:
     1. Click the desired first clip in the list.
     2. Hold down the **Shift** key, while clicking the desired last clip. All clips between the first and last clips are selected.
6. Click **File Output Settings**.
7. Choose your settings in the **File Output Settings** window. For more details on these settings, see the **DVgate Plus** software Help.
8. Click **OK**.

9. Click **Output**.

10. When the **Confirm** window appears, click **OK**.

Using DVgate Software

DVgate Plus software provides complete control over all aspects of capturing, editing, and exporting digital video.

To access the DVgate software's Help

1. Click **Start** on the Windows® taskbar and point to **All Programs**.
2. Point to **DVgate** and click **DVgate Help**.

Starting DVgate software

1. Click **Start** on the Windows® taskbar and point to **All Programs**.
2. Point to **DVgate** and click **DVgate**.

To capture digital video

1. Select **IMPORT** - **Auto** from the **MODE** list in the DVgate window, and click **SCAN**.

   The DVgate software scans your tape and creates a list of video clips for capture.

   ✍ You can manually select video clips to be captured, while viewing playback of your tape in the Monitor window. For details, refer to DVgate Plus software Help.

2. If necessary, edit the list of video clips.

   - **To delete a clip:** Select it and then click **DELETE**.
   - **To change the clip capture order*:*** Drag the individual clips to different locations on the list.

3. To capture all the video clips on the **IN/OUT** list, click **CAPTURE ALL**.

   To capture an individual clip, click to select it in the **IN/OUT list** window and click **CAPTURE**.

4. In the **Save as a file** window, type a name for the file and choose a location to save your video clips. The default save location is on drive D.
5. Click **Save**.

Editing your digital video content

DVgate software enables you to combine your captured video clips into a single movie. You can also trim the beginning and end of each clip, so you only include the scenes you want.

1. Click **Start** and then click **All Programs**.
2. Point to **DVgate** and click **DVgate Assemble.**
3. Click **ADD**.
4. In the **ADD** dialog box, select the video clip files you want to include in your combined movie, and click **Open**.
   - **To select multiple clips:** Hold down the **Ctrl** key while clicking on several files. Your selected clips appear in the **Assemble** list in the **DVgate Assemble** window.
5. In the **Assemble** list, clips are combined in the order they appear starting from the first clip.
   - **To rearrange the clip order:** Drag clips to different positions in the list.
   - **To remove a clip from the list:** Click to select a clip, and then click **DELETE**.
   - **To copy a clip:**
     1. Click to select a clip.
     2. Click **Copy** on the **Edit** menu, and then click the location on the list where you want the copy to be placed.
     3. Click **Insert** on the **Edit** menu.
   - **To trim your video clips:**
     1. Double-click a clip. The clip opens in the **DVgate Assemble** - **Clip** window.
     2. Drag the slider in the middle of the window to the point in the clip where your chosen scene begins.
     3. Click **BEGIN**.
     4. Drag the slider to the point in the clip where your chosen scene ends.
     5. Click **END**.
     6. Click **OK** to save your changes and close **DVgate Assemble** - **Clip** window.
6. When you have set the order of your clips and trimmed them to include only the scenes you want, you can preview the entire finished movie by clicking **PREVIEW ALL** in the DVgate main window.
7. Click **OUTPUT ALL** to save your finished movie to your hard disk drive.
8. Select a file destination for your movie, type a file name, and then click **Save**.

If you intend to export your movie to your DV device later, be sure to select **AVI file (*.avi)** in the **Save as type** box before saving your movie.

Transferring a finished movie to your digital video camera

After you have created a movie, you can export it back to your compatible DV device.

1. Confirm your DV device is set to recording mode. On certain models this is called VCR or VTR mode.
2. Turn on your DV device, and insert a tape.
3. From your VAIO® computer, click **Start** and then click **All Programs.**
4. Point to **DVgate** and then click **DVgate**.
5. Select **EXPORT** - **Auto** from the **MODE** list in the DVgate window.
6. In the **DVgate - AVI file list** window, click **ADD**.

   If the **DVgate - AVI file list** window is not open, click **List** on the **Window** menu.
7. In the **ADD** dialog box, select the movie file you want to export, and click **Open**. The **ADD** dialog box closes, and your selected movie appears in the **Record** list in the **DVgate - AVI file list** window.
8. Click **RECORD ALL**.
9. Click **OK**. The **Output** dialog box closes, and recording to your DV device begins.

For more detailed information, see the DVgate Plus software Help.

Additional Information

- Connect the DV device to your VAIO® computer using an i.LINK cable. Only one DV device can be connected to your computer at a time.
- The Windows® XP operating system (default settings), may display the Digital Video Device window each time you connect a DV device. You can:

  1. Select **DVgate** or **DVgate Plus** to control the DV device, and then click **OK**.
  2. Click **Cancel** to close the **Digital Video Device** window.

- DVgate software does not support hard disk compression. Do not use disk compression if you are planning to work with DVgate software.
- When you are using DVgate software, do not use any other software that may attempt to access the DV device, or other software that plays movies.
- Do not use DVgate software while the external device is in reserve standby mode or while it is recording.
- Writing to a file on a network is not supported.
- The use of more than one monitor is not supported. If you use more than one monitor, the zoom feature does not display.
- DVgate Plus does not support using Windows XP **Fast User Switching** and **Remote Desktop**. If another user logs on with Fast User Switching, DVgate Plus software shuts down. If this occurs, the user must log on again and restart the operation from where the shutdown occurred.
- Files cannot be saved to the root directory of an NTFS formatted hard disk drive, after logging onto Windows XP operating system as a user with limited access. Select any directory other than the root directory to save the files.
- Keep the video head of your DV device properly cleaned. Irregularities that you may see in your captured data can be due to dust or other particles on the video head.
- Video that is copy-protected cannot be captured.

About Networks

VAIO Media software brings networking capability to your preinstalled multimedia software. Depending on the software preinstalled on your system, you can share still images, music, video, and live television to other VAIO® computers on your network[1].

[1] For a listing on the preinstalled software on your computer, see the online or hard copy specifications sheet.

Network media servers

You can set up one or more computers to act as media servers to store and deliver your multimedia files across a wired or wireless network.

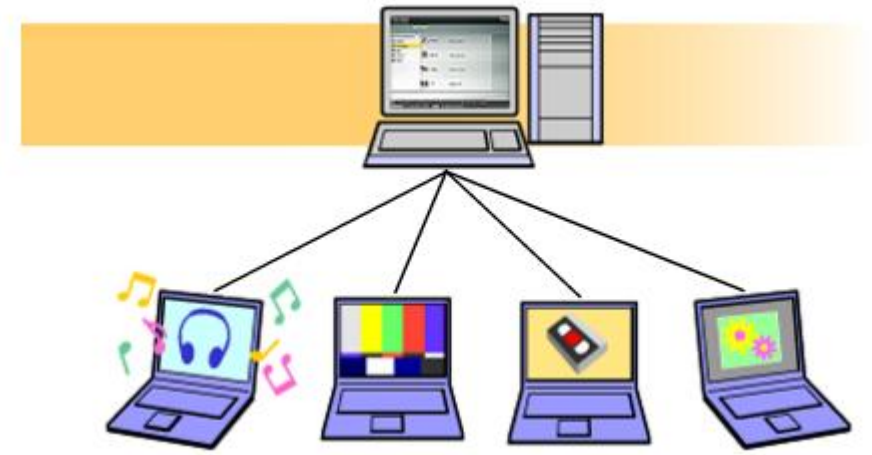
VAIO Media software is available on certain VAIO® computer models.

Using VAIO Media Software

To share music, video, and photos with the VAIO Media system, set up one computer on your network as a media server, and install the VAIO Media client software on other computers. Computers on the network with the VAIO Media client software can then view the multimedia content stored on the VAIO Media server computer.

VAIO computers with Giga Pocket preinstalled are able to stream live television to other machines on your network.

A VAIO® computer network



Your VAIO Media server computer can store and deliver:

- **Music files —** Supports music files in MP3, WAV, OpenMG (ATRAC3), and WMA formats. Use SonicStage software, ver. 1.5 or higher, to create playlists of music to share on your network.
- **Video files** — Supports Video Capsule files created by Giga Pocket software, ver. 5.0 or later. Video Capsules in MPEG1 (LP), MPEG2 (SP), or MPEG2 (HQ) formats are supported. Only VAIO® computers preinstalled with Giga Pocket software, ver. 5.5 or later, can be used as VAIO Media servers for video content.
- **Still image files** — Supports still image files in JPEG, GIF, BMP, PNG, and TIFF formats.
- **TV broadcast** — VAIO computers equipped with Giga Pocket features are able to stream a live TV signal to other computers connected to your network.

System Requirements

To begin sharing multimedia content through the network, activate the VAIO Media software on the server and register client computers to the server.

Server system requirements

- The VAIO Media server requires VAIO computers running Microsoft® Windows® XP Home Edition or Windows XP Professional Edition operating systems. VAIO Media does not support other computers or environments.
- You must connect the server and client computers through a wired network with ethernet cables or a wireless local area network (WLAN).
- Only a VAIO computer with Giga Pocket software, ver. 5.5 or later, can act as a VAIO Media Video Server.

Client system requirements

- All client computers must be VAIO® computers running Windows XP Home Edition or Windows XP Professional Edition operating system. VAIO Media does not support other computers or environments.
- All client computers must be connected to the same network with a server using a hub, ethernet cables, or a wireless LAN.
- All clients computers must have VAIO Media software, ver 2.0 or later, installed before attempting to register.

Network requirements

The VAIO Media network must meet one of the following network requirements:

- Use Ethernet that is built into the VAIO® computer (10BASE-T/100BASE- TX)
- Use a wireless LAN interface (IEEE 802.11a or IEEE 802.11b)

Configure each client computer to use a hub or an access point on the network.

Setting up the client computers

From the server side, you must initialize the installer program and copy it to each client computer in the network.

To distribute the installer program

1. Click **Start** on the Windows® taskbar and point to **All Programs**.
2. Point to **VAIO Media**, point to **Install VAIO Media to other VAIO PCs**, and then click **Get Installer**.
3. A file download message box appears. Click **Save**.
4. Select a location to save the file, **VM25Inst.exe**.

   When saving the installer program to a specific location, browse through the network and save the file to a client computer.

   You can also save the file to a blank storage media, such as a CD-R, CD-RW or Memory Stick® media, for transfer and set up of the program on each client computers.

The VM25Inst.exe file is 19 MB in size. Verify your storage media's capacity before attempting to save the program.

To register client computers

You can only register one client computer at a time. If more than one client computer is actively seeking registration, the server computer registers only one client computer at a time. You must restart the registration process for the other client.

Begin the client computer registration process after you have loaded the **VM25Inst.exe** file on a client computer. Add the file to the client computer and run the **VM25Inst.exe** file.

1. Restart the client computer when you have loaded the file. VAIO Media software appears in the **Start** menu.
2. Click **Start** on the Windows taskbar, and point to **All Programs**
3. Point to **VAIO Media** and then click **VAIO Media**.
4. On the client computer, perform the following steps:
   1. From the **Access Control Settings** tab, select the check box, **Access this computer from other devices connected to the network**.
   2. Select the option, **Register devices accessing this computer [recommended].**
   3. Click **Register**.
   4. Click **Start Registration**.

   If you would like to use a confirmation number to register your computer, leave the check box selected.

   Stand by mode is automatically canceled five minutes after clicking **Start**.
5. From the server computer, accept the new client.

   As the server and client computers recognize each other, the server computer generates a 4-digit number for the client. Type this number on the client machine. Each client computer has a unique number that cannot be used by the other clients on the network. If the registration process is cancelled, no number is generated and the registration process must start over for that client computer.
6. Restart the client computer. A new icon, **VAIO Home Network**, appears on the desktop.

   The installation is complete and users can access media files stored on the VAIO Media server.

Preparing your multimedia content

Use preinstalled software to prepare your multimedia content for sharing across the network, using VAIO Media software.

To prepare your multimedia content:

- **Music files** — Use SonicStage software, ver. 1.5 or later, to create playlists of music files on your VAIO Media server computer. The VAIO Media Music Server software automatically makes SonicStage software playlists available to the client computers on your network.

- **Image files** — Use Photo Server Content Manager to store image files. VAIO Media Photo Server software recognizes .JPEG, .BMP, .GIF, and .TIFF file formats.

- **Video files** — Use Giga Pocket software, ver. 5.0 or later, to create cabinets of Video Capsules on your VAIO Media software server computer. The VAIO Media Video Server software automatically makes Video Capsule cabinets available to the client computers on your network.

VAIO Media Console software starts the appropriate VAIO Media servers (VAIO Media Music Server , VAIO Media Photo Server , or VAIO Media Video Server software.).

Starting VAIO Media Console

1. Click **Start** in the Windows taskbar, and then point to **All Programs**.
2. Point to **VAIO Media**, point to **Server Administration**, and click **Console**.

   Your VAIO Media server computer is now available to serve multimedia content to the VAIO Media client computers on your network.

   To make additional SonicStage playlists or Giga Pocket cabinets available to client computers on your network:

   1. Create the playlists or cabinets, using the appropriate software.
   2. Stop the VAIO Media software, if it is running.
   3. Restart the VAIO Media server software.

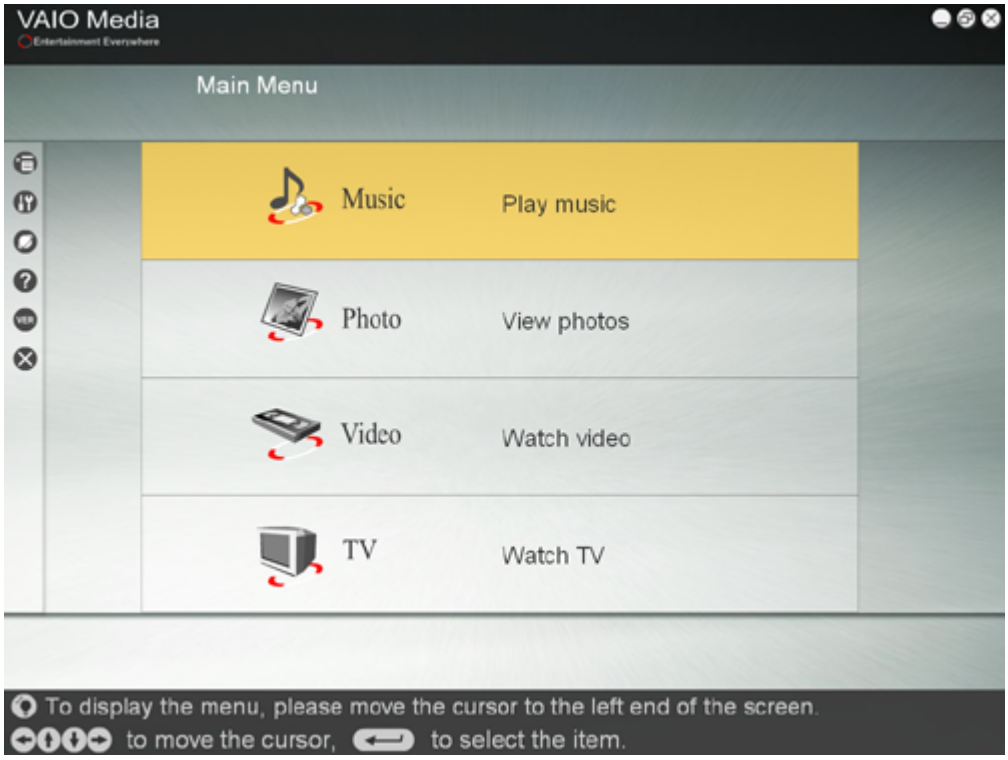
      The music playlists and video cabinet contents are updated when the server software is started.

To view images and video, or listen to music

1. Click **Start** in the Windows® taskbar, and then point to **All Programs**.
2. Point to **VAIO Media**, and then click **VAIO Media**.

   The **VAIO Media** main menu window appears.

VAIO Media main window (client computer)



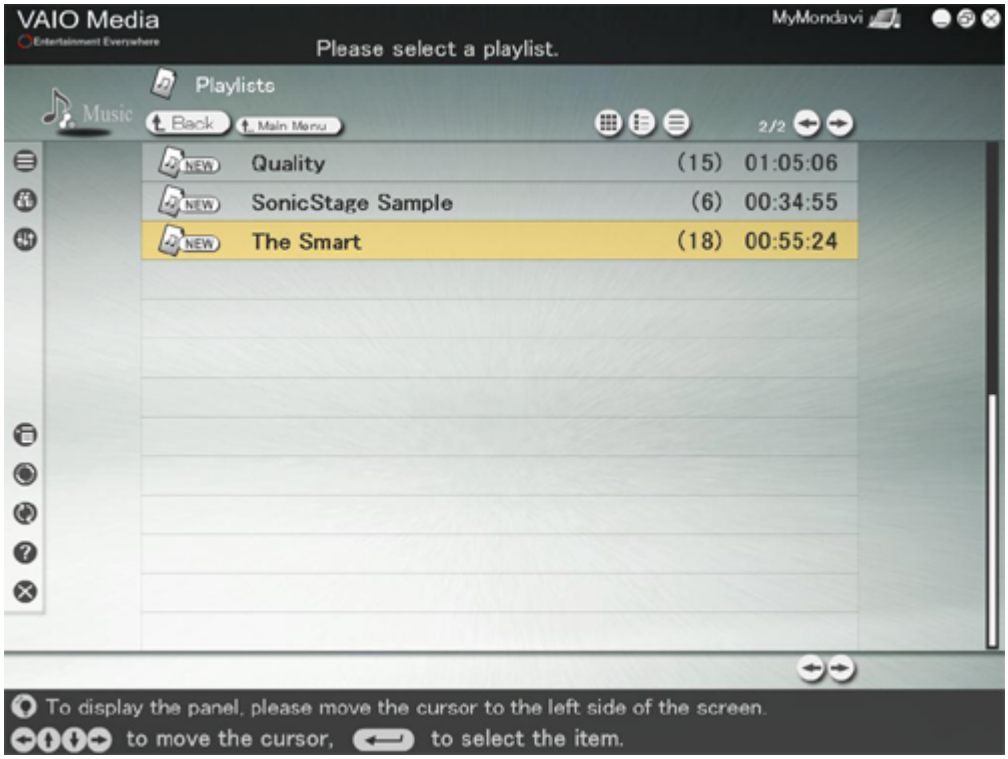
3. Click the type of content you want to view or listen to (Music, Photo, Video, or TV).

   VAIO Media software searches for an available VAIO Media server computer on your network.

   - If more than one VAIO Media server is found, the **Please select a server screen** appears. Select your desired VAIO Media server computer from the list.
   - If only one VAIO Media server is found on your network, the **Playlists** window (music), the **Folders** window (images), or the **Video Cabinets** window (video) appears, depending upon the type of content you selected.

     These windows display lists of playlists, image folders, or video cabinets available on the VAIO Media server.

Playlists window, listing available playlists and a folder of playlists



4. Click the playlist, image folder, or video cabinet you want to view or listen to.

- **Playlists window** — When you click a playlist on the **Playlist** window, it displays a list of the music files on the playlist, and the first music file on the playlist begins playing.
- **Folders window** — When you click a folder on the Folders window, it displays thumbnail images of the image files in that folder. Click an image thumbnail to view the image file.
- **Video Cabinets window** — When you click a folder on the Video Cabinets window, it displays a list of Video Capsules in the cabinet. Click a Video Capsule on the list to view it.

Using Network Smart Capture Software

Network Smart Capture manages the i.LINK®[1] connection between your VAIO® computer and a compatible i.LINK digital camera or camcorder. You can capture and enhance video or still images to share with your family and friends over the Internet or through e-mail.

See the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting i.LINK interface compatible peripherals to your computer, such as an optical drive or hard disk drive, make sure they are compatible with your computer's Microsoft® Windows® operating system and verify the required operating conditions of the devices.

To view the Network Smart Capture software Help

1. Click **Start** on the Windows taskbar and then point to **All Programs.**
2. Point to **Network Smart Capture** and then click **Network Smart Capture Help**.

[1] i.LINK is a trademark of Sony used only to designate that a product contains an IEEE1394 connection. The i.LINK connection may vary, depending on the software applications, operating system and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other.

Starting Network Smart Capture software

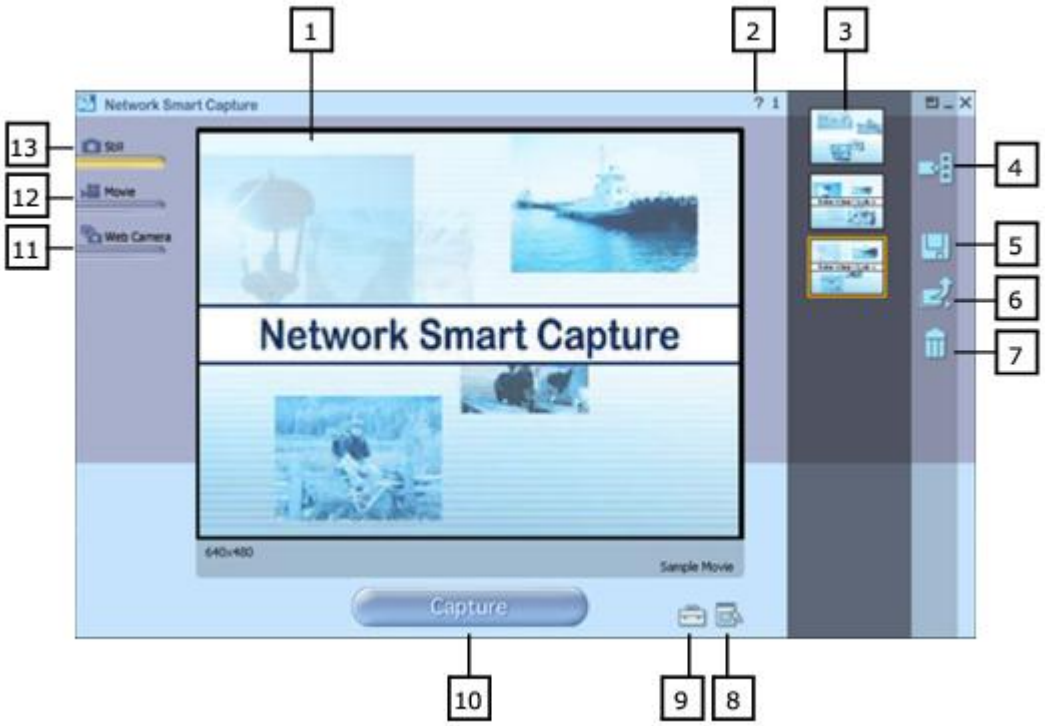
1. Click **Start** on the Windows taskbar and then point to **All Programs.**
2. Point to **Network Smart Capture** and then click **Network Smart Capture**.

   The **Network Smart Capture** main window appears.

   Network Smart Capture opens with a preinstalled video clip in the Finder Window, indicating there is no data input from a digital camera or camcorder.

   When you connect your digital camera or camcorder to your system with an i.LINK® cable and turn it on, an image appears in the main window. Some cameras and camcorders need to have recording media inserted before an image can be displayed in the Finder Window. See the documentation supplied with your digital camera or camcorder for more information.

Network Smart Capture main window



1 Finder Window

Displays images in real-time

Saves an image to your hard disk

2 Help

Displays Help

Set preferences

3 Data list

Displays thumbnails of captured images

Records the image in the Finder window

4 Display Image

8 Select Effect

9 Change Setting

10 Capture

Opens captured images in the Finder window **11 Web Camera**

Captures still images according to specified settings

5 Save As

Saves an image to your hard disk **12 Movie Mode**

Captures video

6 Send the selected images

Enables you to send images or movies by e-mail, to ImageStation® Web site, or to upload them to a photo server **13 Still Mode**

Captures still images

7 Delete

Deletes captured images

✍ You must be connected to the Internet before attempting to upload or e-mail your still images or videos.

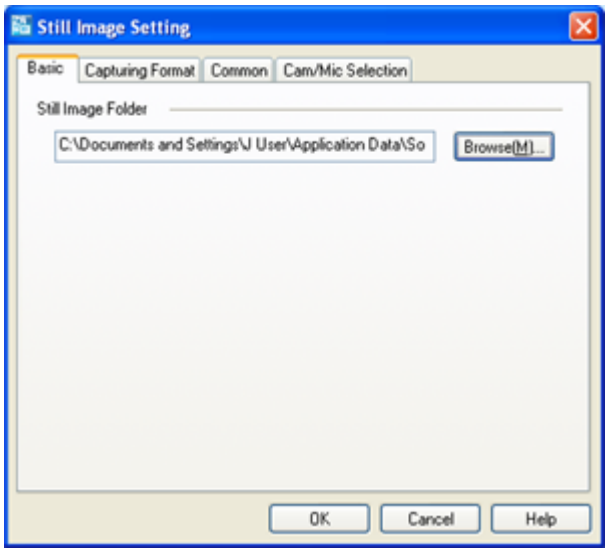
Capturing still images using Still mode

The following information tells you how to set preferences and capture a still image.

To set Still mode preferences

1. Start Network Smart Capture software and connect your compatible i.LINK® digital camera or camcorder to your computer with an i.LINK cable (optional).
2. Click **Still**.
3. Click **Change Setting** to view the setting options for your still image capture.

Still Image Setting



The **Still Image Options** window has four tabs:

- **Basic** — Select a folder destination for your images.
- **Capturing Format** — Select the image size in pixels, and adjust the image quality.
- **Common** — Enable or disable the sound and animation effects; enable or disable sample movie sound; and enable or disable automatic dialup connection for uploading images.
- **Cam/Mic Selection** — Select your primary camera and microphone.

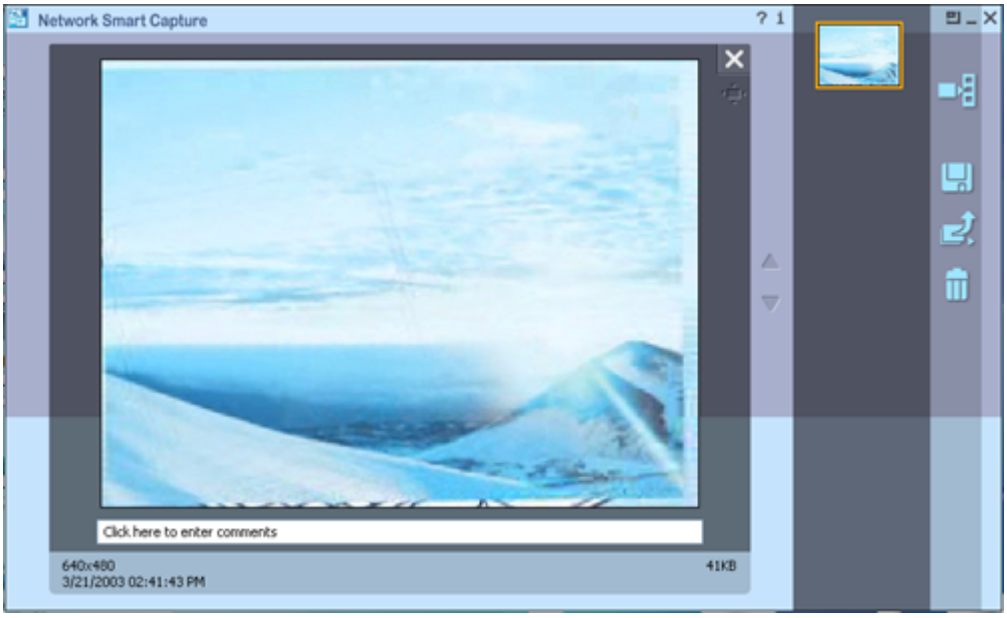
4. Click each tab to view options and set preferences. To apply effects to an image, see Applying effects to your still images and movies.

To capture an image in Still mode

1. Use your digital camera or camcorder to locate the image you want to capture. When you see the desired image in the Finder Window, click **Capture**. You can capture a single image or several image at once.

   Your captured images are stored as thumbnails in the display list area.

Image and thumbnail



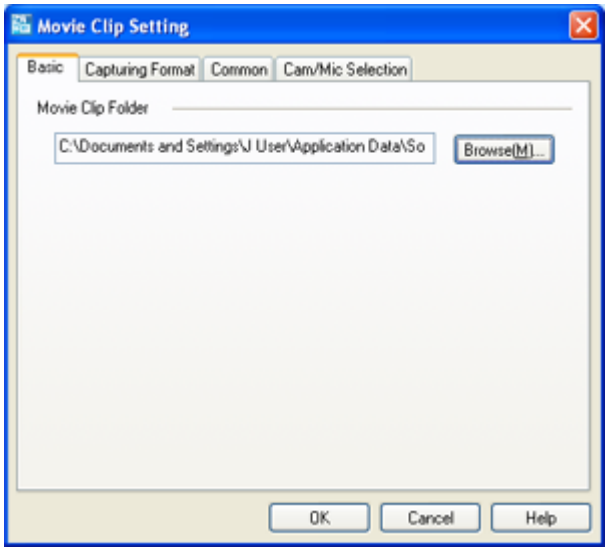
2. Click the thumbnail images or arrows to the right of the Finder Window to view the images. As you capture each image, it appears in the Finder Window.

Capturing video clips using Movie mode

To set Movie mode preferences

1. Start Network Smart Capture software and connect your compatible i.LINK® digital camera or camcorder to your computer with an i.LINK cable (optional).
2. Click **Movie**.
3. Click **Change Setting** to view the available options for your movie capture.

Movie Clip Setting window



The **Movie Clip Setting** window has four tabs:

- **Basic** — Select a folder destination for your movies when recording video clips.
- **Capturing Format** — Adjust the image quality, reduce image noise, and set the maximum recording time for your movie capture.
- **Common** — Enable or disable the sound and animation effects; enable or disable sample movie sound; and enable or disable automatic dialup connection for uploading images.
- **Cam/Mic Selection** — Select your primary camera and microphone.

4. Click each tab to view options and set preferences. To apply effects to an movie, see Applying effects to your still images and movies.

✍ You can remove all special effects by clicking the **No Effects** button.

To capture video content in Movie mode

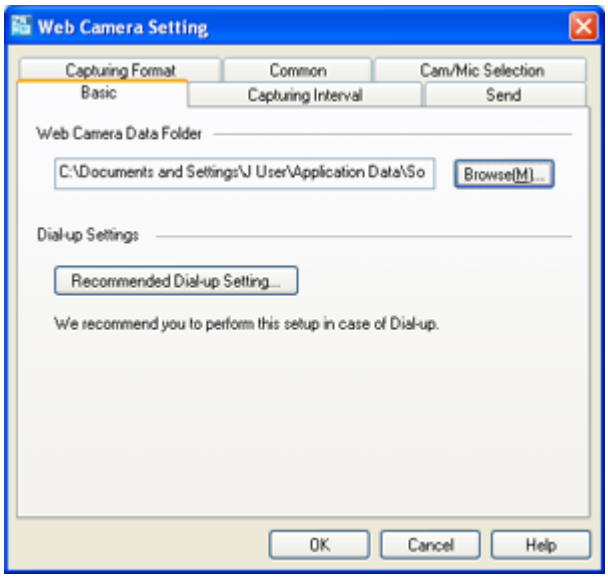
1. Use your digital camcorder to locate the view(s) you want to capture. When you see it in either the Finder Window or your camcorder's viewfinder, click **Record** to begin recording your movie.
2. Click **Stop** when you have finished recording your video. The first frame of your movie appears in the Data list to the right of the Finder Window. Network Smart Capture automatically stops recording according to the recording time set in the Movie Clip Setting window.
3. You can review your movie in the Finder Window by double-clicking the movie thumbnail in the data list.

Capturing Web camera images

To set Web camera mode preferences

1. Start Network Smart Capture software.
2. Click **Web camera**.
3. Click **Change Setting** to view the available options for your image capture.

Web Camera Setting window



The Web Camera Setting window has six tabs:

- **Basic** — Select a folder destination to store your images and choose your dial-up setting.
- **Capturing Interval** — Set your Web camera to capture images at intervals or whenever there is movement.
- **Send** — Set image upload preferences.
- **Capturing Format** — Select the image size in pixels, and adjust the image quality.
- **Common —** Enable or disable the sound and animation effects; enable or disable sample movie sound; and enable or disable automatic dialup connection for uploading images.
- **Cam/Mic Selection** — Select your primary camera and microphone.

4. Click each tab to view options and set preferences. To apply effects to an image, see Applying effects to your still images and movies.

Applying effects to your still images and movies

You can add effects to real-time images or movies displayed in the Finder Window. You can use a different effect for each picture.

Effect Selection

1. Click **Select Effect** near the bottom of the window to open the drop-down list of effects. Click to select digital zoom, effect, or no effect from the list.
2. Use **Previous Page** or **Next Page** to view the sample effects and click the sample to select it.
3. Click **Properties** to adjust settings for the effect you select.
4. Click **OK**.

To remove an effect

Select **No Effect** from the drop-down list.

Using the ImageStation online service

ImageStation® is an online service that allows you to store your images and movies on the Internet to share with family and friends. The ImageStation service requires an Internet connection and registration for the Web-based service. You must be connected to the Internet before uploading your images or movies with Smart Capture and ImageStation programs.

To upload images and movies to the ImageStation Web site

1. Click the ImageStation icon on the right side of the window.

   The ImageStation Login window appears.

   - For first-time users, the ImageStation registration wizard guides you through the initial registration process. Click **Sign Up Now**, and follow the on-screen instructions.
   - If you are already a registered member, type your login name and password, and then click **Login**.

   ✍ It is recommended that your movie file size not exceed 254 MB if compressed or 2 GB if not compressed. Large movie files take longer to upload to the ImageStation Web site.

2. Go to http://www.imagestation.com to view your uploaded pictures or movies. Follow the on-screen instructions to access your ImageStation account. The ImageStation Web site may ask you to complete a full login again, if your current session is not active.

This section provides basic information about managing your computer's i.LINK devices. Your computer may not be equipped with all of the hardware features described in this section, depending on the system configuration purchased. To view the specific hardware configuration for your computer, see the online specifications sheet.

- About i.LINK Compatibility

About i.LINK Compatibility

Your VAIO® computer may be equipped with a 4-pin and/or a 6-pin i.LINK® port, depending on the system configuration purchased. A 4-pin i.LINK port cannot supply power to a connected i.LINK device. A 6-pin i.LINK port can supply power (10V to 12V) to a connected i.LINK device, if the device is equipped with a 6-pin connector.

To view the hardware configuration for your computer, see the online specifications sheet.

The total power supplied by the 6-pin i.LINK port cannot exceed 6 watts.

For PCV-W series models only

Your PCV-W series computer has two 4-pin i.LINK ports available to connect your digital devices. The 4-pin i.LINK ports do not supply power to a connected i.LINK device.

i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other.

Please refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK devices to your system, such as an optical or hard disk drive, confirm their operating system compatibility and required operating conditions.

Connecting an i.LINK (IEEE 1394) device

1. Use the symbol to locate the i.LINK port on your compatible i.LINK device and on your computer. Plug the i.LINK cable connector into this port.
2. Plug the other end of the cable into the corresponding 4- or 6-pin i.LINK port on your computer.

See the instructions that came with your i.LINK device for more information on installation and use.

Upgrade and Maintain your VAIO Computer

In the future you may want to increase the functionality of your VAIO computer. This section describes how to perform basic upgrades and maintenance on your system. For more information on upgrading your computer, see your model's *System Reference Manual*. You can download the *System Reference Manual* from the Sony Computing Support Web site at http://www.sony.com/pcsupport.

- Overview
- About Opening the System Unit
- About Add-on Card Installation
- About Installing Memory
- About the Lithium Battery
- About Hard Disk Drive Installation

Overview

The upgrading procedures described in this section assume that you are familiar with the general terminology associated with personal computers and with the safety practices and regulatory compliance required for using and modifying electronic equipment.

Before upgrading your computer

Disconnect the computer from its power source and from telecommunications links, networks, or modems before you open the unit or follow any procedures described in this section.

Failure to disconnect your computer from its power source may result in personal injury or equipment damage.

Your computer may not be equipped with all of the hardware features mentioned in this section. The interior hardware configuration of your system may vary from the illustrations, depending on the computer purchased. To view the specific hardware configuration for your system, see the online specifications sheet.

You may need to temporarily remove add-on cards or other components that may be near the slot cover you plan to remove.

Electrostatic discharge (ESD) can damage disk drives, add-on cards, and other components. Follow the procedures described here only at an ESD workstation. If such a station is not available, do not work in a carpeted area and do not handle materials that produce or hold static electricity (for example, cellophane wrappers). Ground yourself by maintaining continuous contact with an unpainted metal portion of the chassis while performing the procedure.

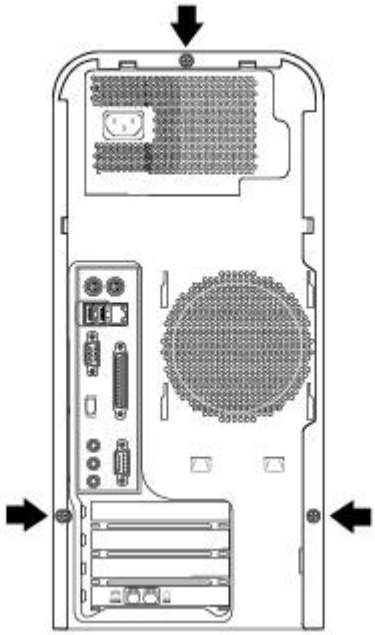
Always turn the power off before you open the system or connect your computer to peripheral equipment. Otherwise, damage may occur to the integrated circuits in your computer.

About Opening the System Unit

Removing the cover

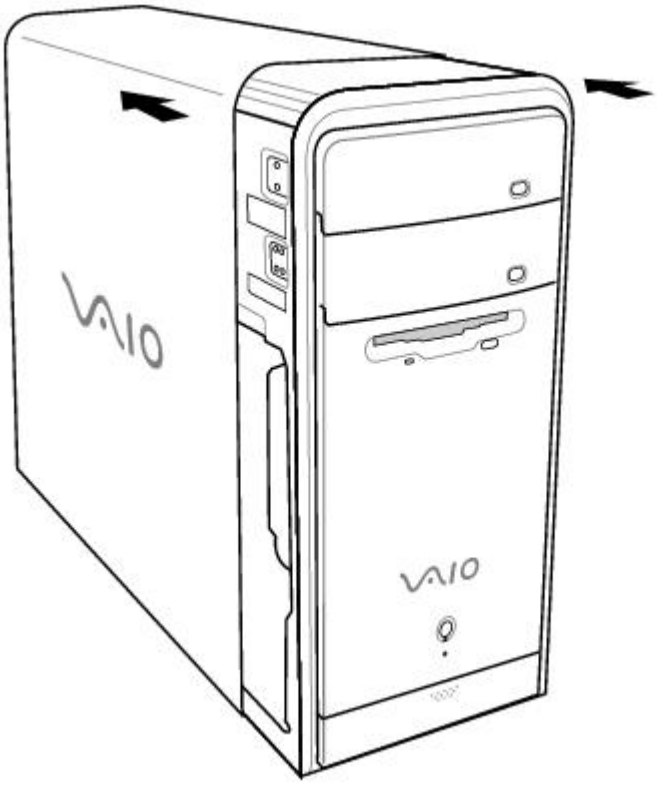
1. Shut down your computer and turn off all peripheral devices, such as your printer.
2. Unplug your computer and disconnect any peripheral devices.
3. Position the system unit so that the back panel is facing towards you.
4. Unscrew the three cover release screws located on the edges of the back panel and set aside.

Removing the release screws (PCV-RS310 series model)



5. When the screws are removed, the cover is released. Slide the cover towards the back of the unit to remove it.

Removing the cover

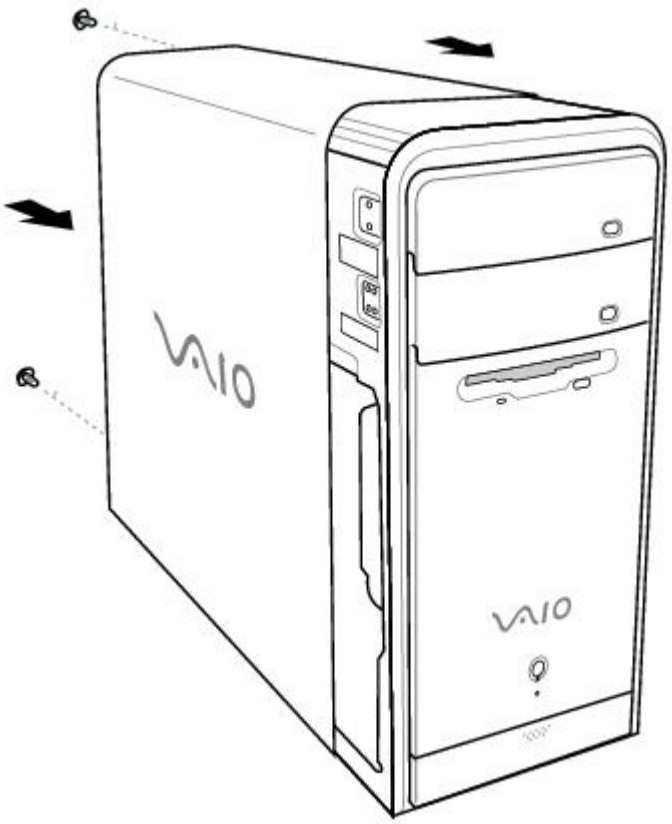


If you remove the cover immediately after you shut down your computer, the components may be too hot to touch. Wait until the internal parts of the system unit cool down before you attempt to remove the cover.

Replacing the cover

1. Carefully align the cover to the chassis frame. The cover should align evenly against the chassis.
2. Slide the cover firmly onto the unit, sliding it forward until the cover snaps into place.
3. Replace the release screws.

Replacing the cover



About Add-on Card Installation

Your computer may have one or more open expansion slots, depending on the model configuration. An expansion slot enables you to install add-on cards to expand the functionality of your system. The length of the add-on card should not exceed 9.05 inches.

Add-on card configuration varies by model. Some models, such as Configure-to-Order (CTO) systems, may contain preinstalled add-on cards.

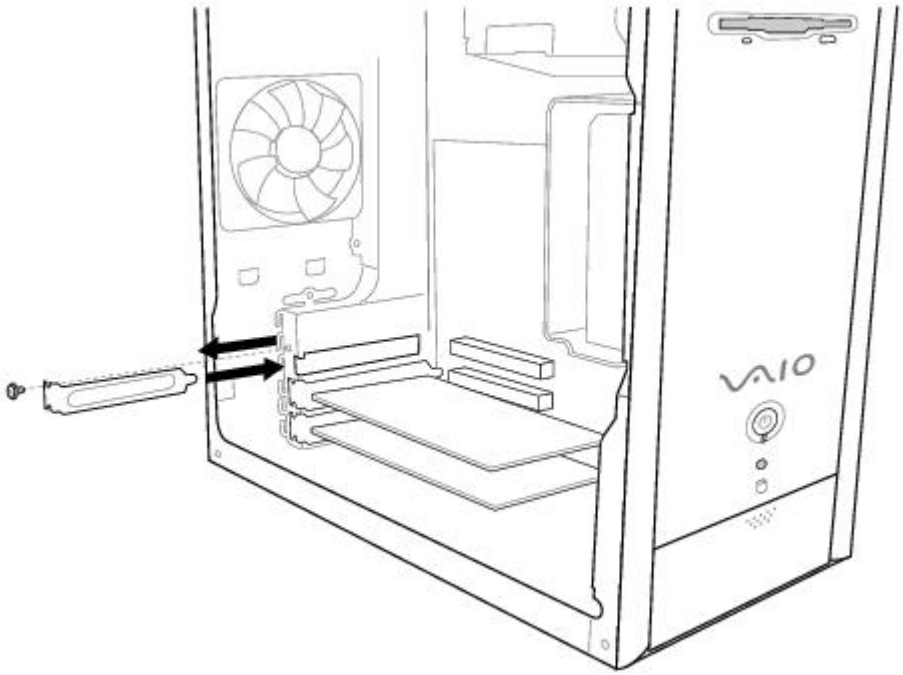
Observe the proper safety precautions when you add cards to your Sony computer. See Before upgrading your computer.

Installing an add-on card

1. Shut down your computer and turn off all peripheral devices, such as your printer.
2. Unplug your computer and any peripheral devices.
3. Remove the cover. See Removing the cover.
4. Locate an available expansion slot. Remove the slot cover's screw, and then remove the slot cover.

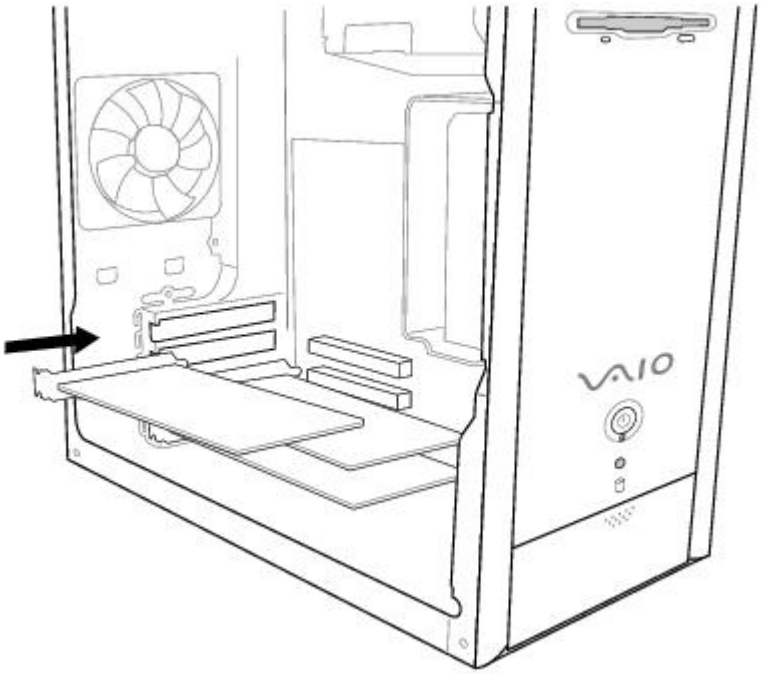
When removing a slot cover, be careful not to damage components on the system board or add-on cards. You may need to temporarily remove add-on cards or other components that may be next to the slot cover you want to remove.

Removing/installing the slot cover



5. Install the add-on card by inserting it into the expansion slot and securing it with the screw from the expansion slot cover.

Installing an add-on card



6. Attach any internal cables that the card requires. See the instructions supplied with the add-on card.
7. Replace the cover. See Replacing the cover.
8. Reconnect the power cord and all peripheral devices.
9. Turn on the computer.

About Installing Memory

The amount of preinstalled memory may vary, depending on the system configuration you purchased. Your computer may ship with all available memory slots filled. For memory replacement or upgrades, use the correct memory module for your computer's configuration. See the online *Specifications* sheet for details about the amount and type of memory installed in your computer.

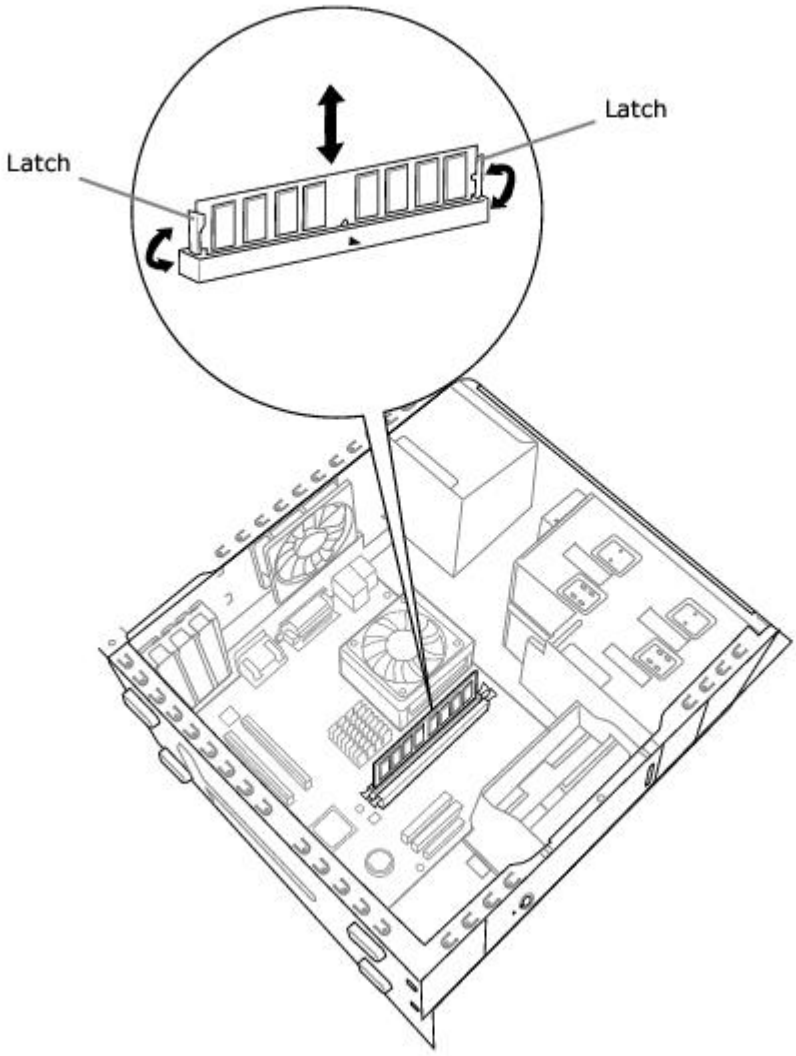
You can purchase additional memory modules, accessories, and peripheral equipment from your local retailer.

Observe the proper safety precautions when you add or remove the memory in your computer. See Before upgrading your computer.

Removing a memory module

1. Shut down your computer and turn off all peripheral devices, such as your printer.
2. Unplug your computer and any peripheral devices.
3. Remove the cover. See Removing the cover.
4. Gently place the unit on its side. If necessary, remove any cables, add-on cards, or other components to access the memory module slots.
5. Locate the memory module(s) you wish to remove.
6. Push down on the latches, located on both sides of the module, to gently eject it from the slot.
7. Grasp one edge of the module and lift it out. Store the module in a static-free bag.

Removing/Installing memory (PCV-RS310 series model)



Installing a memory module

1. Shut down your computer and turn off all peripheral devices, such as your printer.
2. Unplug your computer and any peripheral devices.
3. Remove the cover. See Removing the cover.
4. Gently place the unit on its side. If necessary, remove any cables, add-on cards, or other components to access the memory module slots.
5. Remove the memory module from its anti-static package, handling it by the the edges.
6. Locate the notch on the bottom edge of the module to align it over the open memory slot.
7. Firmly insert the bottom edge of the memory module into the slot.
8. Press down evenly against the module's upper corners. The latches snap into position, holding the module in place.

   To avoid damaging a memory module slot, move the end latches slightly outward to relieve pressure. The module clicks into place.
9. Reinstall any components or add-on cards you may have removed.
10. Replace the cover. See Replacing the cover.

About the Lithium Battery

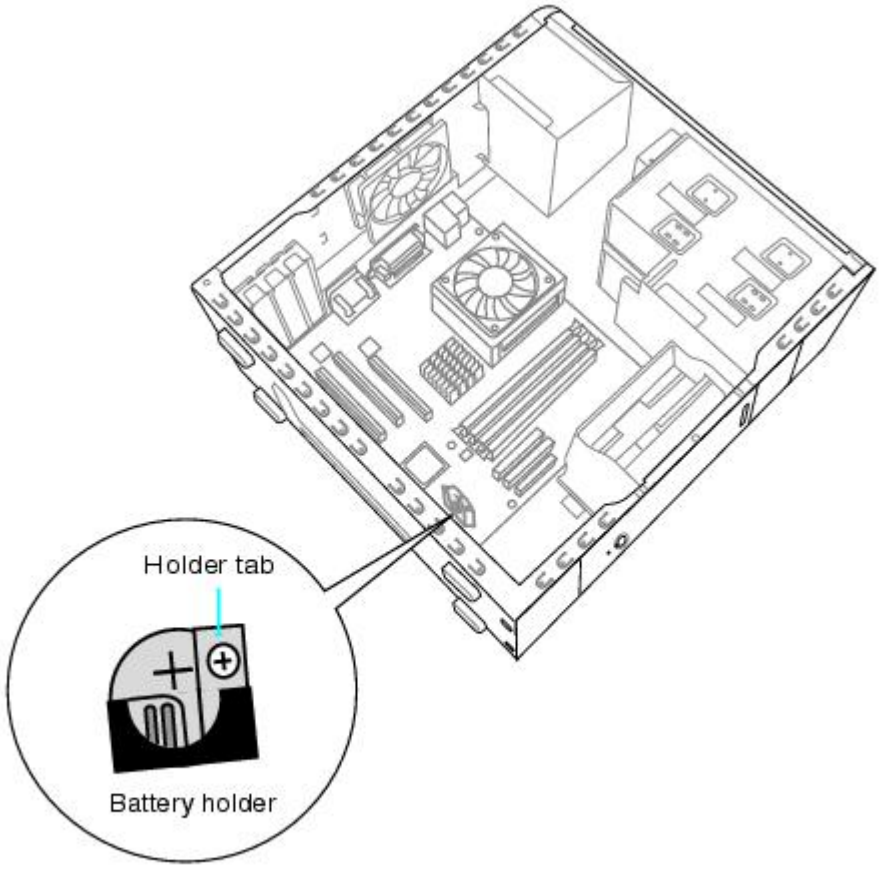
The lithium battery starts to weaken after several years and the system settings, such as the date and time stored in CMOS RAM, may become inaccurate. Replace the lithium battery when this occurs.

There is danger of the battery exploding if it is replaced incorrectly. Replace the battery only with a CR2032-type lithium battery.

Replacing the lithium battery

1. Write down any changes you may have made to the settings in the BIOS Setup utility.
2. Shut down your computer and turn off all peripheral devices, such as your printer.
3. Unplug your computer and any peripheral devices.
4. Remove the cover. See Removing the cover.
5. If necessary, remove any cables, add-on cards, or other components to access the lithium battery.
6. Gently push the battery holder's tab away from the battery and remove the battery from the holder.
7. Install the new battery with the plus (+) side facing the battery holder tab.

Installing a lithium battery (PCV-RS320 series model)



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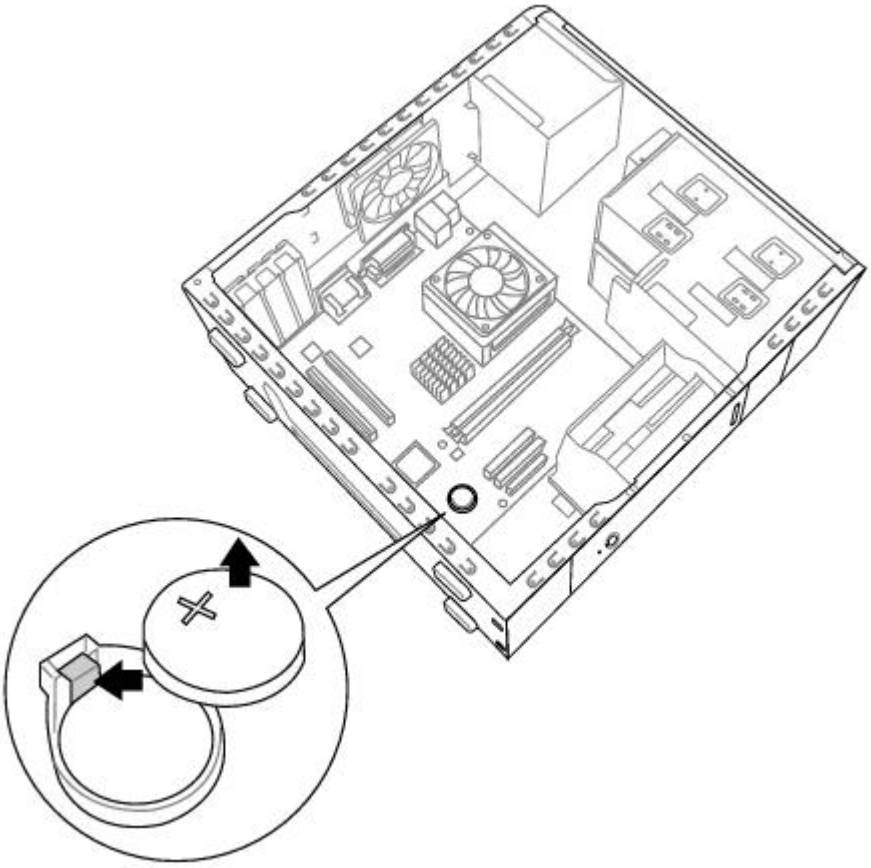
Installing a lithium battery (PCV-RS310 series model)



Replacing the lithium battery (PCV-RS310 series model)

Remove the old battery and install the new battery with the plus (+) side up.

8. Replace the cover. See Replacing the cover.

The values stored in the CMOS memory are now reset to the factory default values. Run the Setup utility to reset the date, time, passwords, and other changes you may have made to the BIOS settings. If you do not wish to customize your BIOS settings, do not run the Setup utility.

Dispose of the lithium battery properly. In some areas, the disposal of lithium batteries in household or business trash may be prohibited. You can return your unwanted lithium batteries to your nearest Sony Service Center or Factory Service Center. To locate a Service Center near you, visit the Sony Computing Support Web site at http://www.sony.com/pcsupport.

Resetting the computer's date and time

1. Double-click on the time readout displayed in the Windows® tasktray. The Date and Time Properties window appears.

2. From the Date & Time tab, change the settings as desired. Click **Apply**, then click **OK**.

About Hard Disk Drive Installation

Your computer comes with an available internal bay to hold a second standard 3.5-inch hard disk drive. Some models, such as Configure-to-Order (CTO) systems, may already have a second hard disk drive installed. Your system can support ATA-33, ATA-66, or ATA-100 hard disk drives. Sony recommends using an ATA-100 hard disk drive to take full advantage of your system's features.

✍ The hard disk drive access indicator is lit when either internal hard disk drive is active.

Replacing the original hard disk drive

If you replace the original, factory-installed hard disk drive, your system cannot restore the drive partitions, operating system, or original software, using the preinstalled Hard Drive Recovery utility.

The Hard Drive Recovery utility is a quick and easy-to-use program that can restore your system if it becomes unstable or stops working properly.

To enable you to recover your system with the VAIO Recovery utility, you can purchase a Partition Recovery CD Assembly (Partition Recovery ASSY) to restore your system.

Follow these steps to order the Partition Recovery CD Assembly:

1. Connect to the Internet.
2. Go to Sony Direct Accessores and Parts Center Web site at http://servicesales.sel.sony.com.
3. In the section, **Search by Model for Accessories**, type in your computer model and click **List Parts and accessories**.
4. From the list of accessories, locate the Partition Recovery ASSY and click the option, **Add to Cart**.
5. Click **Continue to Check Out**, and follow the on-screen instructions to complete your purchase.

If you are not able to access the Sony Direct Accessories and Parts Center Web site, contact a customer service representative at 1-800-488-7669.

For more information about hard disk drive recovery:

1. Click **Start** in the Windows® taskbar, then click **Help and Support**.
2. From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.

Using the Sony Computing Support Web site

For detailed information about installing additional hard disk drives, see the *System Reference Manual*. You can download the *System Reference Manual* from the Sony Computing Support Web site at: http://www.sony.com/pcsupport.

Your computer must have an active Internet connection to access the Sony Computing Support Web site.

From the Sony support Web site:

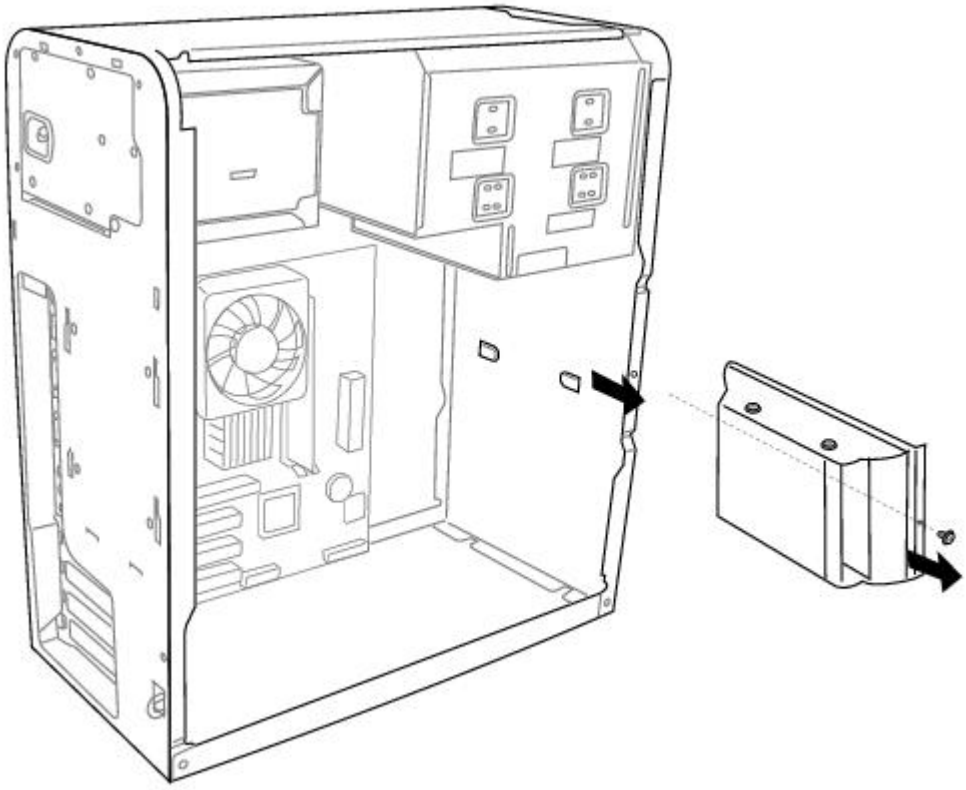
1. Click on **Computers & Peripherals, Desktops** and click to select the appropriate model series from the submenu.
2. Click the link for your computer model number. The model-specific support page appears.
3. Under **Documentation**, click ***System Reference Manual*** or ***System Reference Guide***.

Make sure you observe the proper safety precautions when you upgrade your Sony computer. See Before upgrading your computer.

Installing an additional hard disk drive

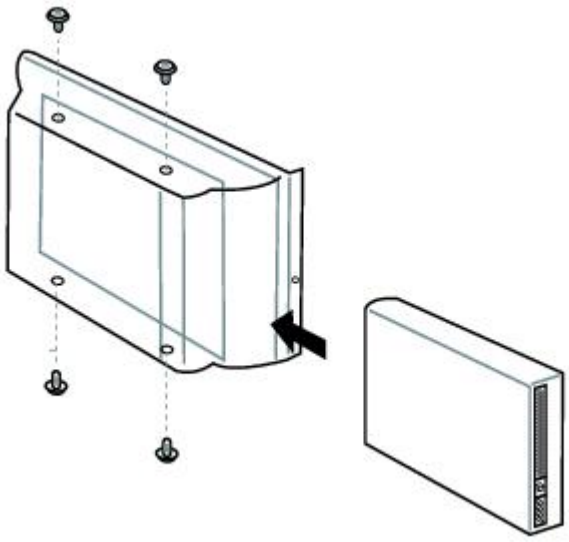
1. Shut down your computer and turn off all peripheral devices, such as your printer.
2. Unplug your computer and any peripheral devices.
3. Remove the cover. See Removing the cover.
4. Configure the jumpers on the new drive as a slave. See the configuration instructions supplied with your drive.
5. Detach the power and drive cables from the original hard disk drive that is preinstalled in your computer.
6. Release the drive holder from the chassis by removing the drive holder screw.
7. Slide the drive holder out.

Removing the drive holder



8. Slide the new drive into the drive holder and align the holes on each side of the drive to the holes in the Drive holder.
9. Secure the drive to the drive holder with screws, through the holes on each side of the drive holder.

Attaching the drive screws



Your new hard disk drive is supplied with the necessary screws. Do not overtighten these screws when securing

the new drive to the drive holder.

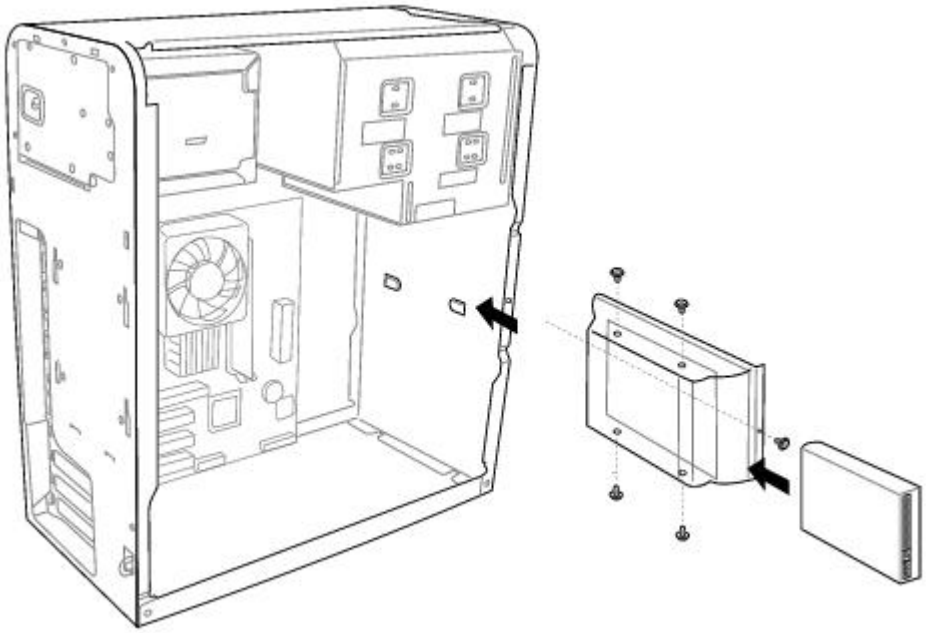
10. Realign the drive holder with the tracks on the inside of the chassis and slide the drive holder in completely.

11. Reinsert the drive holder screw and tighten to lock the drive holder back into position.

12. Connect the second drive connector to the new drive. Orient the connector to align pin 1 on the red side of the ribbon cable with pin 1 on the new drive.

13. Connect the second power connector to the new drive, following the instructions supplied with the drive.

Replacing the drive holder



14. Replace the cover. See Replacing the cover.

15. Reconnect the power cord to your computer.

Identifying the additional hard disk space

When you initialize the new hard disk, it must be configured as an extended partition in Windows NT file system (NTFS) format.

1. Log on to Windows® as Administrator.
2. Click **Start** in the Windows taskbar, then right-click **My Computer**. A shortcut menu appears.
3. Select **Manage**. The Computer Management window appears.
4. Under the file directory, go to **Storage** and then select **Disk Management**.
5. Right-click on the newly installed, unformatted hard disk (Disk label identified with red marking). From the shortcut menu, select **Initialize Disk**.
6. Click on the Unallocated area of the disk and then right-click to display a shortcut menu.
7. Select **New Partition**. The New Partition wizard appears.
8. Follow the wizard's on-screen instructions to complete the process.

The Windows® XP operating system recognizes the new hard disk drive and applies the NTFS format.

Troubleshooting

This section describes how to troubleshoot common problems. You can also find helpful information on how to use your computer's hardware features and preinstalled software. Your computer may not be equipped with all of the features or software discussed in this section, depending on the system configuration purchased.

- About VAIO Computer Functions
- About Using the Optical Disc Drive(s)
- About the Mouse and Keyboard
- About the Modem
- About the Speakers
- About Using a Microphone
- About Using Peripheral Equipment

My computer does not start.

- Verify that the computer is plugged into a power source and that it is turned on. Check that the power indicator is lit on the front panel of the computer.
- Confirm that a disk is not in the floppy disk drive[1] (unless you are using a bootable floppy disk).
- Confirm that a CD is not in an optical drive (unless you are using a bootable CD).
- Confirm that the power cord and all cables are connected firmly.
- If you plugged the computer into a power strip or Uninterruptible Power Supply (UPS), make sure the power strip or UPS is turned on and working.
- Verify that the monitor is plugged into a power source and turned on.

  If your system has a built-in monitor, confirm that it is plugged into an appropriate power source and that the system is turned on.
- Verify that the brightness or contrast control dials are adjusted correctly. (See the manual that came with your display for details.)
- Confirm that the computer is not in stand by mode by pressing any key on the keyboard.

[1] Certain VAIO computers are not equipped with a floppy disk drive. You can purchase this equipment separately.

My computer does not start.

- Verify that the computer is plugged into a power source and that it is turned on. Check that the power indicator is lit on the front panel of the computer.
- Confirm that a disk is not in the floppy disk drive[1] (unless you are using a bootable floppy disk).
- Confirm that a CD is not in an optical drive (unless you are using a bootable CD).
- Confirm that the power cord and all cables are connected firmly.
- If you plugged the computer into a power strip or Uninterruptible Power Supply (UPS), make sure the power strip or UPS is turned on and working.
- Verify that the monitor is plugged into a power source and turned on.

  If your system has a built-in monitor, confirm that it is plugged into an appropriate power source and that the system is turned on.
- Verify that the brightness or contrast control dials are adjusted correctly. (See the manual that came with your display for details.)
- Confirm that the computer is not in stand by mode by pressing any key on the keyboard.

[1] Certain VAIO computers are not equipped with a floppy disk drive. You can purchase this equipment separately.

Why did my computer or software stop responding?

You can try to locate and close the software application that has stopped responding.

1. Press the **Ctrl+Alt+Delete** keys. The Windows Task Manager window appears.
2. From the Applications tab, locate the application that has the status message, "**Not responding**."
3. Select the application that has a **Not Responding** status and click **End Task**. Windows attempts to close the application.

If your computer does not respond or the application does not close, try the following steps:

1. Save any open files, if possible.
2. Press the **Alt+F4** keys. The Turn Off Computer window appears.
3. Click **Restart**.

If your computer still does not respond and you cannot restart, shut down your computer by pressing and holding the power button for more than six seconds.

If the software application continues to stop responding or causes your computer to stop responding, contact the software publisher or designated technical support provider.

Pressing and holding the power button for more than six seconds, may result in the loss of data from files that are currently open.

Why does the Windows operating system stop responding during shutdown?

The Windows operating system may not shut down properly for many reasons, including incompatible or conflicting drivers, damaged files, or non-responsive hardware. For troubleshooting information, you can search Windows Help.

1. Click **Start** in the Windows taskbar and select **Help and Support**. The **VAIO Help And Support Center** menu appears.

2. Select **Fixing a Problem** and then select **Startup and Shut Down problems**. A list of specific problem topics appears on the right side of the dialog box.

3. Select **Startup and Shutdown Troubleshooter**. Follow the on-screen instructions according to your specific situation.

Why is my system running slowly?

- The system responsiveness varies depending with the number of applications that are open and running. Close any applications that you are not currently using.
- Increasing the system memory may also help. For information on installing memory, please see the online VAIO User Guide.

To access the online User Guide:

1. Click **Start** in the Windows taskbar, and then click **Help and Support**.
2. From the **VAIO Help And Support Center** menu, click **VAIO User Guide**.

How do I change the video resolution of my display?

1. Click **Start** in the Windows taskbar, and then select **Control Panel**.
2. Select **Appearance and Themes**, and then select **Change the screen resolution**.
3. Click the **Settings** tab.
4. Change the Screen resolution and Color quality to the desired levels.
5. Click **Apply** and then click **OK**.

About Using the Optical Disc Drive(s)

Your computer may not be equipped with all of the hardware features listed in this section. To view the specific hardware configuration for your system, see the online specifications sheet.

Why doesn't my optical drive tray open?

To use the Eject button

1. Make sure the computer is turned on.
2. Press the Eject button on the drive.

To use the My Computer icon

1. Click **Start** in the Windows taskbar, then select **My Computer**.
2. Right-click the appropriate optical drive icon.
3. Select **Eject** from the shortcut menu.

✍ Avoid using adhesive labels to identify your CD or DVD media. Adhesive labels may come off while the CD or DVD media is in use in your optical drive(s) and may cause damage to the unit.

Why can't I play a DVD or CD media?

- After inserting your CD or DVD, wait a few seconds for the system to detect it before trying to access it.
- Confirm that the disc is in the tray with the label side facing up.
- Install your CD or DVD software according to the manufacturer's instructions.
- If your drive reads some DVDs or CDs, but not others, check the shiny side of the disc for dirt or scratches.
- The preinstalled CD or DVD software may not be working properly. To recover this software, see the online guide, *VAIO Recovery Options*, for more information.

  To access *VAIO Recovery Options*, follow these steps:

  1. Click **Start** in the Windows® taskbar and click **Help and Support**.
  2. From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.

Why isn't my DVD playing properly?

- If a region code warning appears when you are using the DVD player application, it may be that the region code of the DVD you are trying to play is incompatible with the region code setting of your optical drive. A region code is listed on the disc packaging. Region code indicators such as "1" or "ALL" are labeled on some DVDs to indicate the type of player that can play the disc. Unless a "1" or "ALL" appears on the DVD or on its packaging, you cannot play the disc on this system.

- If you hear audio but cannot see video, your computer's video resolution may be set too high. To improve video resolution, verify that your screen area is set to 1024 x 768[1], using 32-bit color (preset factory default). To verify or change your video resolution:

    1. Click **Start** in the Windows taskbar and then select **Control Panel**.
    2. Select **Appearance and Themes**, then select **Change the screen resolution**.
    3. Click the **Settings** tab.
    4. Change the Screen resolution and Color quality to the desired levels.
    5. Click **Apply** and then click **OK**.

- If you see video but cannot hear audio, check all of the following:

    1. Verify that your DVD player's mute feature is turned off.
    2. Check the master volume setting in the Audio Mixer.
    3. Check the volume settings on your computer speakers.
    4. Check the connections between your speakers and the computer.
    5. Verify that drivers are installed properly, by following these steps:

        1. Click **Start** in the Windows taskbar, then select **Control Panel**.
        2. Click **Performance and Maintenance** and then click **Systems**. The System Properties dialog box appears.
        3. Select the **Hardware** tab and then select the **Device Manager** button to view installed drivers.

- A dirty or damaged disc may also cause the computer to stop responding while it tries to read the disc. If necessary, remove the disc and check that it is not dirty or damaged.

- The preinstalled CD or DVD software may not be working properly. To recover this software, see the online guide, *VAIO Recovery Options*, for more information.

    To access *VAIO Recovery Options*, follow these steps:

    1. Click **Start** in the Windows® taskbar and click **Help and Support**.
    2. From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.

[1] The VAIO "W" series computer uses 1280 x 768 for the default video resolution setting.

Why doesn't my mouse work properly?

- Confirm that the mouse is plugged securely into the mouse port. If you are using a USB mouse, verify that the mouse is plugged securely into the appropriate USB port.
- Save and close all open applications. Turn off your computer, wait approximately 10 seconds, and then restart your computer.
- If you are using an optical mouse, use an appropriate surface to ensure proper mouse tracking. A good mouse surface requires a certain amount of detail or texture to enable mouse tracking.
  - Use surfaces such as plain paper, card stock, or fabric that do not have a lot of repetitive patterning.
  - Avoid surfaces such as mirrors, smooth glass, or magazines.
  - Avoid possible damage to easily-scratched surfaces by using a mouse pad.
  - Avoid surfaces that may damage or soil your optical mouse. Dirt or damage may cause the mouse to malfunction.
  - If the cursor is not moving properly, try using the mouse on another mousing surface or using a mouse pad.
- If you are using a trackball mouse, there may be dust or dirt inside the mouse mechanism. To clean the mouse, follow these steps:
  - Save and close all applications, and turn off your computer.
  - Turn the mouse upside down.
  - Remove the mouse ball cover on the back of the mouse by turning clockwise the ring that covers the mouse ball.
  - Turn the mouse upright, and drop the mouse ball into your hand.
  - Using a piece of tape, remove any dust or dirt on the mouse ball and inside the mouse ball socket.
  - Return the mouse ball to the socket, and replace the mouse ball cover. Secure the cover by turning the ring counter-clockwise.
- The mouse driver(s) may not be working properly. To recover your mouse drivers, see the online guide, *VAIO Recovery Options*, for more information.

  To access *VAIO Recovery Options*, follow these steps:
  - Click **Start** in the Windows® taskbar and click **Help and Support**.
  - From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.

Why doesn't my mouse work properly?

- Confirm that the mouse is plugged securely into the mouse port. If you are using a USB mouse, verify that the mouse is plugged securely into the appropriate USB port.
- Save and close all open applications. Turn off your computer, wait approximately 10 seconds, and then restart your computer.
- If you are using an optical mouse, use an appropriate surface to ensure proper mouse tracking. A good mouse surface requires a certain amount of detail or texture to enable mouse tracking.
  - Use surfaces such as plain paper, card stock, or fabric that do not have a lot of repetitive patterning.
  - Avoid surfaces such as mirrors, smooth glass, or magazines.
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  - Turn the mouse upright, and drop the mouse ball into your hand.
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  - Click **Start** in the Windows® taskbar and click **Help and Support**.
  - From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.

How do I set up my mouse for left-hand use?

1. Click **Start** in the Windows taskbar, then click **Control Panel**.
2. Click **Printers and Other Hardware**, then click **Mouse**. The Mouse Properties dialog box appears.
3. From the **Buttons** tab, select **Switch primary and secondary buttons** under the Button Configuration options.
4. Click **Apply**, then click **OK**.

Why doesn't my keyboard work properly?

- Check that the keyboard[1] is securely plugged into the keyboard port.
- Save and close all open applications. Turn off your computer, wait approximately 10 seconds, and then restart your computer.

[1] The VAIO "W" series computer has a built-in keyboard.

Why is my modem connection slow?

Many factors can influence modem connection speed, such as:

- Telephone line noise.
- Incompatibility with other telephone equipment such as fax machines or other modems.
- Internet Service Providers (ISP) connection capability may vary.

If you think your modem is not connecting properly to other PC-based modems, fax machines, or your ISP, check the following:

- Contact your telephone company and ask them to verify that your telephone line is free from line noise.
- If your problem is fax-related, check that there are no problems with the fax machine you are calling and that it is compatible with fax modems.
- For optimum performance, verify that your ISP point of presence (POP) telephone number is compliant with V.90 standards.
- If you are having a problem connecting with your ISP, check that they are not experiencing technical problems.
- Try connecting your modem through another telephone line, if available.

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- If you are having a problem connecting with your ISP, check that they are not experiencing technical problems.
- Try connecting your modem through another telephone line, if available.

Why doesn't my modem work properly?

Your modem may be experiencing equipment or software conflicts. If your modem is not functioning properly, check the following:

- Check that the telephone line is plugged into the modem line jack.
- Check that the telephone line is working properly. You can verify the line by plugging in an external device such as a standard telephone or fax machine and listening for a dial tone.
- Check that the access telephone number (POP) is correct.
- All software applications that are preinstalled by Sony are compatible with your computer's modem. If you have installed other software, contact the software publisher for information on how to configure the software in order to recognize the modem.
- If it appears that your modem is not functioning properly, check the device status.

  1. Click **Start** in the Windows taskbar, then click **Control Panel**.
  2. Click **Printers and Other Hardware** and then select **Phone and Modem Options**.
  3. From the **Modems** tab, click to select your modem.
  4. Click **Properties**. The Modem Properties window appears.
  5. Review the information in the Device status section. If your modem is not working properly, click the **Troubleshoot** button. The VAIO Help And Support Center window appears.
  6. Follow the on-screen instructions to resolve the problem.

- The modem driver(s) may not be working properly. To recover your modem drivers, see the online guide, *VAIO Recovery Options*, for more information.

  To access *VAIO Recovery Options*, follow these steps:

  1. Click **Start** in the Windows® taskbar and click **Help and Support**.
  2. From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.

How do I change my modem to rotary or Touch-tone dialing?

1. Click **Start** in the Windows taskbar, then click **Control Panel**.
2. Click **Printers and Other Hardware**, then click **Phone and Modem options**.
3. From the **Dialing Rules** tab, click **Edit**. The Edit Location dialog box appears.
4. Select the **Tone** or **Pulse** option. Click **OK**.

About the Speakers

Why is there no sound in any application?

- Check that the speakers are plugged into the Headphones jack.
- If your speakers have a mute button, verify that it is turned off.
- If your speakers are powered by batteries, verify that the batteries are inserted properly and that they are charged.
- If your speakers use an external power source, verify that the power cord is plugged into a grounded wall outlet or power strip.
- If your speakers have volume control, check the volume level.
- You cannot hear sound from your speakers if headphones are connected to your computer.
- If the software application you are using has its own volume control, check that the volume is turned up.
- Check the volume controls in the Windows® operating system using these steps:

  1. Click **Start** in the Windows taskbar, then select **Control Panel**.
  2. Select **Sounds, Speech, and Audio Devices**, then click **Adjust the system volume**.
  3. From the **Volume** tab, adjust the Device volume by moving the slider bar to the desired sound level. Verify that the Mute option is not selected.

- Check that the Mute check box is not selected in the Windows volume control.
- The sound driver(s) may not be working properly. To recover your sound drivers, see the online guide, *VAIO Recovery Options*, for more information.

  To access *VAIO Recovery Options*, follow these steps:

  1. Click **Start** in the Windows® taskbar and click **Help and Support**.
  2. From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.

For PCV-W series models only

- Adjust the volume control dial, located on the left panel, to adjust speaker volume.
- The speakers continue to produce sound even when headphones have been connected. If you want to use your own headphones instead of the supplied speakers, adjust the volume control dial, located on the left panel, to mute the sound from the built-in stereo speakers.

About the Speakers

Why is there no sound in any application?

- Check that the speakers are plugged into the Headphones jack.
- If your speakers have a mute button, verify that it is turned off.
- If your speakers are powered by batteries, verify that the batteries are inserted properly and that they are charged.
- If your speakers use an external power source, verify that the power cord is plugged into a grounded wall outlet or power strip.
- If your speakers have volume control, check the volume level.
- You cannot hear sound from your speakers if headphones are connected to your computer.
- If the software application you are using has its own volume control, check that the volume is turned up.
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- Check that the Mute check box is not selected in the Windows volume control.
- The sound driver(s) may not be working properly. To recover your sound drivers, see the online guide, *VAIO Recovery Options*, for more information.

  To access *VAIO Recovery Options*, follow these steps:

  1. Click **Start** in the Windows® taskbar and click **Help and Support**.
  2. From the **VAIO Help And Support Center** menu, click **VAIO Recovery Options**.

For PCV-W series models only

- Adjust the volume control dial, located on the left panel, to adjust speaker volume.
- The speakers continue to produce sound even when headphones have been connected. If you want to use your own headphones instead of the supplied speakers, adjust the volume control dial, located on the left panel, to mute the sound from the built-in stereo speakers.

About Using a Microphone

Why doesn't my microphone work properly?

Check that the microphone is plugged into the Microphone jack.

About Using a Microphone

Why doesn't my microphone work properly?

Check that the microphone is plugged into the Microphone jack.

Why is my microphone so sensitive to background noise?

If you find there is too much background noise when you record sound, you should adjust the microphone by following these steps:

1. Click **Start** in the Windows taskbar, then click **Control Panel**.
2. Click **Sounds, Speech, and Audio Devices**, then click **Sounds and Audio Devices**.
3. From the **Audio** tab, locate the **Sound recording** section and click **Volume**. The **Recording Control** dialog box appears.

   If the volume control for the microphone is visible, skip to step 6.
4. Select the **Options** menu and click **Properties**. The **Properties** dialog box appears.
5. In the section, **Show the following volume controls**, select the **Recording** option. Click **OK**.
6. From the **Recording Control** dialog box, decrease the microphone volume level by moving the slider bar down.
7. Close the **Recording Control** dialog box and then close the **Sounds and Audio Devices Properties** window.

How do I install a printer?

- Connect your USB or IEEE 1394 printer to the appropriate port on your computer's front, back or side panels[1]. If your printer has a USB, IEEE 1394, or infrared connection, contact the printer manufacturer for information or updates that may be required for proper installation.
- Check the printer manufacturer's Web site for the latest drivers for your operating system before proceeding with installation. Some printers do not function properly without the updated drivers for specific operating systems.
- To install your printer, follow these steps:

1. Click **Start** in the Windows taskbar, then click **Control Panel**.
2. Click **Printers and Other Hardware**, then click **Add a Printer**.
3. From the **Add Printer Wizard**, click **Next**.
4. Select **Local Printer**, then click **Next**.

   Place a check mark in the box for "Automatically detect and install my Plug and Play printer", if you are installing a recently manufactured printer with Plug and Play capability.
5. Select the appropriate port, usually LPT1, and then click **Next**.
6. Select the appropriate printer manufacturer and model.
7. Follow the on-screen instructions to print a test page and complete printer installation.

If the printer is not included in the list and the printer manufacturer included a disk with a Windows XP Printer driver, choose **Have Disk**, enter the appropriate path for the disk or CD and click **OK**.

If the printer is not included on the list and no drivers are included with the printer, choose an alternate printer driver that your printer may emulate. Refer to the manual that came with your printer for specific emulation information.

[1] The location of the connection ports for peripheral equipment may vary, depending upon your computer's hardware configuration.

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The connected printer does not function properly when the computer resumes from a power saving mode.

- Clear the printer memory by turning the printer off for approximately 10 seconds, and then turning it back on.
- If your printer does not resume normal operations, try restarting your computer.

Notes On Use

The information in this section provides basic procedures for handling your system and common peripheral devices, using storage media, and locating upgrade procedures. A support resource listing is also provided to help you locate the appropriate support options.

- About the Power Source
- About Disposing of the Lithium Battery
- About Handling the Computer System
- About Handling a Monitor (Display)
- About Recording and Data Storage Media

About the Power Source

Before opening your computer, turn the system off and let it cool down for 10 minutes. This protects you against internal components that may be too hot to handle.

- Your computer operates on 100-120 V AC 50/60 Hz only.
- Plug all the power cords for your computer and its peripheral equipment into the same AC supply line. AC derived from different supply lines may result in voltage differences that can cause unstable operation or unwanted weak currents at the time of connection.
- Do not share the AC outlet with any other power-consuming equipment, such as copying machines or shredders.
- You can purchase a power strip with a surge protector. This device prevents damage to your computer caused by sudden power surges such as those that may occur during an electrical storm.
- If you live in an area that experiences frequent power fluctuations, you may want to purchase an Uninterruptible Power Supply (UPS). This device contains both a surge protector and a battery backup. The surge protector prevents damage to your computer caused by power surges. The battery backup safeguards your data during a brief period of power loss.
- The power control button on the front panel does not turn off the system AC power. To remove power from the system, you must turn off the computer and then unplug the AC power cord from the wall outlet or power strip.
- Do not place heavy objects on the power cord.
- Do not operate the system with the cover removed. Always reinstall the cover before turning on the system.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- Unplug your computer from the wall outlet if you do not intend to use the computer for a long time.
- Do not attempt to open the power supply. There are no user-serviceable parts in the power supply. To avoid personal injury or damage to your equipment, refer the repair or replacement of the power supply to qualified personnel only.

About Disposing of the Lithium Battery

Dispose of the lithium battery properly. In some areas, the disposal of lithium batteries in household or business trash may be prohibited. You can return your unwanted lithium batteries to your nearest Sony Service Center or Factory Service Center. For the Sony Service Center nearest you, visit the Sony Computing Support Web site at http://www.sony.com/pcsupport.

Do not handle damaged or leaking lithium batteries. The lithium battery may explode if mistreated. Do not disassemble it or dispose of it in fire.

Replace the battery with a Sony CR2032 lithium battery. Using a type of battery other than a CR2032 may present a risk of fire or explosion.

About Handling the Computer System

Your computer uses high-frequency radio signals and may cause interference to radio or TV reception. If this occurs, relocate the computer a suitable distance away from the TV or radio equipment.

- Do not place your Sony computer in a location subject to:
  - Heat sources, such as radiators or air ducts
  - Direct sunlight
  - Excessive dust
  - Mechanical vibration or shock
  - Strong magnets or speakers that are not magnetically shielded
  - Ambient temperature of more than 95ºF (35ºC) or less than 50ºF (10ºC)
  - High humidity, moisture, or rain
- Do not place electronic equipment near your computer. The computer's electromagnetic field may cause a malfunction.
- Provide adequate air circulation to prevent internal heat build-up. Do not place your computer on loose surfaces (such as rugs or blankets) or near materials (such as curtains or draperies) that may block its ventilation slots. Leave a space of at least 8 inches from the back panel of your computer.
- Clean the cabinet with a soft, dry cloth or a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent such as alcohol or benzine, as it may damage the finish of your Sony computer.
- Should any solid object or liquid fall into the cabinet, keyboard, or mouse, shut down your computer and then unplug it. You may want to have the computer checked by qualified personnel before operating it any further.
- Use only specified peripheral equipment and interface cables; otherwise, problems may result.
- Do not use cut or damaged connection cables.
- Always switch the power off before connecting your computer to peripheral equipment; otherwise, damage may occur to the integrated circuits in your computer.
- Your computer, keyboard, and mouse consist of high-precision electronic parts. Do not drop them or bump them against other objects.
- Your Sony computer does not work with party lines, cannot be connected to a coin-operated telephone, and may not work with multiple telephone lines or a private branch exchange (PBX).
- If the telephone company makes a service call to your home or office and determines that your computer is responsible for the problem, the telephone company may bill you for the service call. If you do not disconnect your computer when it is adversely affecting the telephone line, the telephone company has the right to disconnect your service until you correct the problem.

Moisture condensation

If your computer is brought directly from a cold location to a warm one, moisture may condense inside your computer. In this case, allow at least an hour before turning on your computer. If any problem occurs, unplug your computer, and contact your Sony Service Center.

The hard disk drive

- Do not place the computer in a location that is subject to vibration or shock.
- Do not move the computer during operation.
- Do not subject the computer to sudden changes in temperature.
- Do not turn off the power while the computer is accessing the hard disk drive.

About Handling a Monitor (Display)

- DVD playback and certain video-related software may not function correctly when your monitor is set to a high refresh rate. If your monitor does not play back video content properly, try setting the display to a lower refresh rate.
- Do not place the display near a strong magnetic force.
- Do not block the ventilation slots on the display.
- Using the computer in low temperature conditions may produce a residual image on the screen. This is not a malfunction. When the computer returns to normal temperature, the screen returns to normal.
- A residual image may appear on the screen if the same image is displayed for a lengthy period of time. The image disappears after a period of time. You can use a screen saver to prevent residual images.
- The screen becomes warm during operation. This is normal and does not indicate a malfunction.

About handling an LCD monitor[1] (display)

- Do not place the display near a strong magnetic force.
- Do not block the ventilation slots on the display.
- Using the computer in low temperature conditions may produce a residual image on the screen. This is not a malfunction. When the computer returns to normal temperature, the screen returns to normal.
- A residual image may appear on the screen if the same image is displayed for a lengthy period of time. The image disappears after a period of time. You can use a screen saver to prevent residual images.
- The screen becomes warm during operation. This is normal and does not indicate a malfunction.
- Do not leave the LCD in direct sunlight, as this may damage the screen. Use caution when using the computer near a window.
- Do not exert pressure on the LCD or scratch the surface, as this may cause the screen to malfunction.
- The LCD screen is manufactured using high-precision technology. On occasion, you may see tiny black or colored points on the LCD. This is normal and does not indicate a malfunction.
- Avoid rubbing the screen, as this can damage the LCD. Use a soft, dry cloth to clean the display.

[1] The PCV-W series models have a built-in LCD monitor

About Recording and Data Storage Media

Handling CD or DVD media

- Do not touch the surface of the disc.
- Do not drop or bend the disc.
- Do not use adhesive labels to identify the disc. The label may come off while the disc is in use in the optical drive and damage the drive.

Cleaning CD or DVD media

- Fingerprints and dust on the surface of a disc may cause read errors. Proper care of the disc is essential to maintain its integrity. Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray, as they may cause damage to the disc.
- For normal cleaning, hold the disc by its edge and use a soft cloth to wipe the surface from the center out.
- If the disc is badly soiled, moisten a soft cloth with water, wring it out well, and use it to wipe the surface of the disc from the center out. Wipe off any remaining moisture with a dry soft cloth.

Using Memory Stick media

- MagicGate Memory Stick and Memory Stick PRO media are the only media that support MagicGate technology. Currently, Sony® SonicStage and OpenMG software are not compatible with the new Memory Stick PRO media. Sony suggests using only the MagicGate Memory Stick media to store and transfer any data created with SonicStage and OpenMG software.
- Currently, the Memory Stick slot on VAIO® computers does not support the high-speed data transfer or access control features of the new Memory Stick PRO media.
- Visit the Customer Support Web site at http://www.sony.com/pcsupport regularly for the latest information on the new Memory Stick PRO media.

Handling floppy disks[1]

- Do not open the shutter manually and touch the surface of the floppy disk.
- Keep floppy disks away from magnets.
- Keep floppy disks away from direct sunlight and other heat sources.

[1] The VAIO "W" series computer is not equipped with a floppy disk drive. You can purchase a floppy disk drive separately.

Support Options

Sony provides several options to help solve common problems or to locate support for your VAIO® computer. This section describes all available resources and offers suggestions on how to access this information for maximum results.

- Immediate Help and Support
- Help and Support Resources

Immediate Help and Support

You can locate helpful information immediately by consulting your hard copy guides and supplements, or by accessing the online Computer User Guide and the individual software Help files.

Your computer is supplied with these support options:

- **VAIO® Computer Quick Start —** The Quick Start contains information on how to set up your computer quickly and easily. You can find instructions on how to plan an ergonomic work space, connect power cords, cables and peripheral devices, register your computer with Sony, and establish a dial-up connection to the Internet. The Quick Start can also provide troubleshooting support, if problems occur.

- **VAIO® Computer User Guide —** The online User Guide provides information about configuring, maintaining, and upgrading your computer. This support resource offers a variety of available topics, enabling you to quickly view specific information using context-sensitive search features. To access the online manual:

  1. Click **Start** in the Windows® taskbar, then click **Help and Support**.
  2. From the **VAIO Help And Support Center** menu, click **VAIO User Guide**.

- **Specifications —** The online specifications sheet describes the hardware and software configuration of your VAIO computer. To view this online information:

  1. Click **Start** in the Windows taskbar and click **Help and Support**.
  2. From the **VAIO Help And Support Center** menu, click **VAIO User Guide**.
  3. Locate the link in the text, "View the VAIO® Computer Specifications..."

- **Preinstalled software Help files —** Each preinstalled software application provides online Help within the software, that describes the software's features. In these Help files, you can find tutorials that teach you to use the software and locate troubleshooting support, should problems occur. To access software Help files:

  1. Click **Start** in the Windows taskbar and point to **All Programs**. A submenu appears, listing all preinstalled software applications.
  2. Click the desired software application.[1] The software's main window appears.
  3. From the menu bar, click **Help**. The Help file appears.

[1] You can locate the online Help for Sony software applications by pointing to the individual application's icon and selecting Help from the submenu.

Help and Support Resources

If the information provided with your VAIO® computer does not provide an immediate solution or you would like to get direct support, try these help and support resources.

Software Help and Support

The contact and support information for the preinstalled software on your system is located in the online specifications sheet. Software support is free of charge for 90 days after the original date of purchase.

Your computer may not be supplied with all of the software discussed in this section, depending on the system configuration you purchased. To view the specific software preinstalled on your computer, see the online specifications sheet.

Sony Computing Support Web site

Online help and support are available 24 hours a day, seven days a week, when you visit the Sony Computing Support Web site. You can access the Web site at http://www.sony.com/pcsupport.

The Sony Computing Support Web site provides:

- Information about your specific model computer, such as
  - hardware and software specifications.
  - upgrade and maintenance procedures.
  - safety and legal information.
  - quick solutions to common problems.
- An automated tutorial library that contains interactive, easy-to-understand lessons on using your computer's hardware and software features.
- Links that enable you to:
  - quickly find the nearest Sony service center locations.
  - arrange for repairs or check repair status.
  - review warranty information.
  - e-mail your question or comments to the Sony Customer Information Services Center.
  - check pricing and availability for products, accessories and parts, as well as purchase online.
  - access the Sony Solutions Knowledge Base, a database that contains answers to many frequently asked questions.

Sony Customer Information Services Center

If other support options do not resolve your issue, you can contact a Sony Support representative directly.

Before making a call to the Sony Customer Information Services Center, have this basic information readily available.

1. VAIO® computer system type
2. Model number
3. Serial number[1]

   Example:

4. Operating system

5. Hardware feature or software application that has a problem. (See Help and Support Resources for the appropriate software contact information.)

6. Brief description of the issue.

For VAIO® computers purchased in the U.S. and Canada, contact a Sony Support representative at 1-888-476-6972.

[1] The serial number is located on the back panel of your computer. The serial number is on a white barcode label.